



PERFORMANCE WORK STATEMENT (PWS)

Facility Operation and Maintenance Support Services

for the

**Beltsville Area (BA) and the
National Agricultural Library (NAL)**

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SECTION C

Scope of Work

Facilities Operations and Maintenance Support Services Beltsville Area (BA) and National Agricultural Library (NAL)

C.1 GENERAL INFORMATION

C.1.1 FACILITIES

This Performance Work Statement (PWS) describes the performance requirements for selected activities for the United States Department of Agriculture (USDA) Beltsville Area (BA) agencies located throughout the eastern United States (U.S.) and the National Agricultural Library (NAL) in Beltsville, Maryland. The Beltsville Area consists of the Beltsville Agricultural Research Center (BARC) in Beltsville, Maryland; the U.S. National Arboretum (USNA) in Washington, District of Columbia (D.C.); and worksites in Presque Isle, Maine; Chapman, Maine; Chatsworth, New Jersey; McMinnville, Tennessee; and Glenn Dale, Maryland. In addition to BA, NAL, and associated worksites, the various requirements shall extend to local agencies in Beltsville, MD; U.S. Secret Service (USSS) facility and the ARS research personnel in the Animal Plant Health Inspection Service (APHIS) in Building 580. The term “Service Provider or SP” is used throughout this document and applies to the proposal selected to perform this PWS, whether Federal Government or commercial Service Provider (SP), unless otherwise specified. The goal of this PWS is to obtain efficient, cost-effective services.

BA and NAL conduct major research programs related to the study of soils, plants, floral and nursery crops, animals, and human nutrition. BA and NAL are organized under the Agricultural Research Service (ARS) which is the principal research agency of the USDA and the Research, Education, and Economics (REE). The ARS conducts research to develop and transfer solutions to agricultural problems of high national priority and provide information access and dissemination to ensure high-quality safe food and other agricultural products; to assess the nutritional needs of the American people; to sustain a competitive agricultural economy; to enhance the natural resource base and the environment; and to provide economic opportunities for rural citizens, communities, and society as a whole.

C.1.1.1 BELTSVILLE AREA

C.1.1.1.1 Beltsville Agricultural Research Center (BARC) *10300 Baltimore Avenue, Beltsville, Maryland 20705-2350* *www.ba.ars.usda.gov*

The BARC conducts basic and applied research in all areas of plant and animal science, entomology, natural resources and environmental sciences, food technology, food safety, and human nutrition. Considered the largest, most diversified agricultural research facility in the world, with ongoing research programs and field and laboratory facilities for the study of soils,

plants, animals, and human nutrition, the BARC has become a world leader in agriculture research with an international reputation that attracts thousands of visitors each year.

The BARC is particularly well known for its multidisciplinary, integrated research approaches to large problems in food and agricultural research. Ever-increasing sophistication of instrumentation aids scientists who work in state-of-the-art greenhouses and laboratories, controlled-environment chambers, and animal facilities, as well as in the field.

Currently, the BARC facility encompasses 6541 acres of land and approximately 65 miles of roadway. There are over 600 buildings which include offices, laboratories, barns, livestock shelters, and storage and utility buildings. The general boundaries of BARC and major buildings within the facility are displayed in Appendix C, Maps and Area Layout.

BARC is designated by the State of Maryland as a Historic District. Therefore, any alterations to facility building exteriors, construction projects, demolition requirements, and landscaping alterations shall be approved by the Maryland Historic Trust / National Capital Planning Commission (NCPC) and authorized Government representatives. The SP shall also consider master plans when reviewing proposals to include Environmental Assessments.

C.1.1.1.2 United States National Arboretum (USNA)
3501 New York Avenue, NE, Washington, D.C. 20002-1958
www.usna.usda.gov

Established in 1927 by an Act of Congress, the USNA is a USDA research and education facility and living museum encompassing 449 acres. It is dedicated to serving the public and improving our environment by developing and promoting improved floral and landscape plants and new technologies through scientific research, educational programs, display gardens, and germplasm conservation. USNA is a national center for public education and cultural experiences that welcomes visitors in a stimulating and aesthetically pleasing environment. USNA accommodates approximately 500,000 visitors annually, placing a high percentage of the facility work in the view of the public. Facility layout and grounds are displayed in Appendix C, Maps and Area Layout.

USNA is designated by the District of Columbia as a Historic District. Therefore, any alterations to facility building exteriors, construction projects, demolition requirements, and landscaping alterations shall be approved by the Maryland Historic Trust / NCPC and authorized Government representatives. The SP shall also consider master plans when reviewing proposals to include Environmental Assessments.

C.1.1.2 NATIONAL AGRICULTURAL LIBRARY (NAL)
10301 Baltimore Avenue, Beltsville, Maryland 20705-2351
www.nal.usda.gov

The NAL is located on the grounds of the BARC. The NAL serves as a National Library of the U.S. for agricultural needs and as the Library of the USDA. NAL's vision is to

ensure and enhance access to agricultural information for a better quality of life. The NAL leads the information revolution for forging partnerships and exploring new methods and techniques that advance open and democratic access to information. As leaders of the nation's agricultural legacy, NAL preserves and protects information for future generations. The NAL acquires, organizes, manages, preserves, and provides access to information and provides quality stewardship of the unique collection. The Library assists, trains, and educates people based on assessment of the information sought. In addition, the NAL maximizes the access to information through collaborative efforts and utilization of technology and enhances global cooperation through an international exchange of information and the provision of services and technical assistance. The NAL facility layout and grounds are displayed in Appendix C, Maps and Area Layout, within the BARC facility layout. In addition to the facility located on the BARC grounds, NAL provides as needed support to the D.C. Reference Center (annex library) located in the USDA South Agriculture building.

C.1.2 SUMMARY OF EXPECTATIONS

C.1.2.1 The SP shall meet requirements and responsibilities defined in this PWS. The overall impression and appearance of the SP's staff, facilities, and equipment should convey a professional image. The SP shall ensure quality work is performed at the USDA in accordance with Federal, state, and local laws as well as applicable USDA standards and guidelines. The SP shall perform the requirements of this PWS in an environmentally acceptable manner consistent with Federal, state, and local laws, and equipment shall be operated and maintained according to manufacturer's specifications. Cooperation and flexibility are expected from the SP to adapt to changing requirements, equipment, new technology, and unexpected needs that commonly occur in the research and farming environments. The SP shall conform to new procedures, regulations, and policies that may be implemented during the term of the contract. In the instance work is being conducted in a highly public, highly traveled venue, the SP shall be aware of constraints as not to disrupt or intrude on research and the public by controlling dust, noise, temporary utility lose, or other elements of the tasks.

C.1.2.2 SP staff shall be fully trained, professional, and customer-service oriented to provide consistent quality service in a responsive, flexible, innovative, and cost effective manner. The SP staff must be able to communicate effectively with Government officials, peers, subordinates, and visitors to perform assignments in an effective manner consistent with the BA and NAL missions. The staff is expected to be familiar with trade techniques and applications and proficient in using motorized and non-motorized equipment. The SP shall maintain specific knowledge of active research protocols (such as infectious agents, animals, locations, and any specialized requirements) and of the regulations / guidelines applicable (such as those pertaining to trade codes, animal care, environmentally preferable products, and biosafety level requirements). The SP shall conform to animal care provisions of the following whenever an animal environment is affected: The Animal Welfare Act (Title 9, CFR 2000); Guide for the Care and Use of Laboratory Animals (National Research Council, 1996); Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching (Federation of Animal Science Societies); ARS Policies 635.1, Humane Animal Care and Use, and 130.4, Animal Care and Use Committee; and recommendations for maintenance and repair set forth by the Beltsville Animal Care and Use Committee (BAACUC). Key personnel are expected to communicate in English this knowledge

using scientific and medical vocabulary. Successful completion of appropriate employee background investigations is required.

C.1.2.3 The SP shall work closely with the research personnel and other Government employees to ensure the uninterrupted pursuit of knowledge and new technologies for which these facilities are world renowned. The SP shall be able to understand and appreciate the intricate and sensitive nature of research to preserve the integrity of the research process and results. Therefore, it is critical that support services for the facility operations are reliable, professional, continuous, flexible, timely in scheduling and performance, immediate in the event of emergencies, and of the highest quality possible. The SP shall maintain public facilities in a manner that the areas are available except when critical opposing needs and objectives or emergency conditions prevent these facilities from being open and fully operational. The SP shall be required to operate and maintain facilities and equipment and assist facility staff in the presence of unsightly and highly sensitive research, e.g., research animals, biohazard materials and conditions, and exotic crops and products.

C.1.3 SCOPE OF WORK

C.1.3.1 The SP shall provide qualified labor, supervision, equipment, and supplies / materials, except those furnished by the Government, necessary to perform the facilities operations and maintenance support services described in Section C.2 of this PWS. The SP shall be responsible for maintaining current facility buildings and equipment to their most productive and efficient state of performance. The SP shall be responsible for maintaining facility grounds to an aesthetically pleasing atmosphere. The SP may also be required to provide same services to buildings and equipment as they are constructed and acquired during the life of this contract due to research protocols, updated technology, and needs, e.g., a multi-story biohazard greenhouse and a steam sterilizer macerator.

C.1.3.2 The purpose of this PWS is to define the maintenance and service requirements in terms of output requirements and the quality level or standard of acceptable performance of those outputs. The PWS shall define objectives to be met and provide for objective measurement, whether qualitatively or subjectively, of the requirements.

C.1.4 PERSONNEL

C.1.4.1 The SP shall provide an on-site project manager or a designated on-site representative to be available at all times for discussion with the Government Contracting Officer (CO) or Contracting Officer's Representative (COR). The project manager shall act as the central point of contact with the CO / COR except during times work is performed outside normal operating hours, in which case the SP shall designate an individual to act for the project manager.

C.1.4.2 The SP shall furnish fully trained and qualified personnel to accomplish work prescribed in this PWS. All SP employees shall be U.S. citizens. A U.S. citizen is defined as an individual who is native born, naturalized, or derived citizenship from U.S. parent(s). An individual possessing a "green card" (permanent resident alien) is not considered a U.S. citizen.

The SP shall employ only persons able to speak, read, write, understand and communicate in English. SP employees shall have in their possession at the start of the contract, licenses and certifications for both Maryland and D.C. jurisdictions required to meet regulatory compliance and facility policy. In specific tasks (Central Heating, Lead Electrician (Master), Heating Ventilation / Air Conditioning, Plumbing, Refrigeration / Universal Technician, and Wastewater and Water Treatment), each SP employee assigned to those tasks shall possess certification individually. Performing under a supervisor who holds that particular certification is permissible by Maryland Department of Environment (MDE) but is not adequate for this PWS. Personnel assigned to positions requiring record keeping and computer usage shall possess required mathematical skills and be computer literate. Personnel assigned to positions requiring the use of motor vehicles, farm equipment, specialized equipment, tools, or instruments shall be well qualified to use this equipment. SP personnel performing outdoor work shall be physically capable of performing work under all climatic conditions

C.1.4.3 All personnel employed by the SP or any representative of the SP entering Government property shall obey instructions, rules, regulations, or operating procedures that apply to the BA, NAL, and associated worksite employees. SP shall be responsible for maintaining satisfactory standards of employee professionalism, competency, conduct, appearance, and integrity in accordance with the Department of Agriculture Human Resources Management Employee Responsibilities and Conduct Personnel Bulletin (735-1) (accessible at <http://www.usda-ethics.net>). The Government reserves the right to require removal from the work location of any SP employee who endangers persons or property or whose continued employment is inconsistent with the interests of the Government as determined by the CO. Further, the Government reserves the right to refuse to permit any SP employee who is not in compliance with the requirements in this PWS as determined by the CO to perform services. In such cases, the CO will advise the SP in writing of the reason for directing employee removal or withdrawing employee authorization to enter the work location. **When an SP employee separates from this contract, the following items must be turned in: ID cards, electronic access and/or proximity cards; keys, manuals, fueling station keys; materials, tools, equipment that had been turned over to the SP employee at the initiation of the contract, and any replacements for the above during the performance of this contract. In addition, the following actions must occur; relinquish any official authorizations, such as to act for the agency, property passes, etc.; fulfill obligations of pesticide applicator permits (for example, reassign materials or dispose of chemicals in accordance with applicable regulations/policies); clear assigned space, and remove personal items. The SP is accountable for any damage to equipment and space.**

C.1.4.4 SP personnel shall wear appropriate uniforms while performing official duties. Personnel normally working in an office setting are not required to wear a uniform, but shall comply with conventional office attire. Employees traveling outside the boundaries of the facility shall dress in a manner appropriate for the task, while representing the Federal Government in a professional manner to the public.

C.1.5 OPERATING CONDITIONS

C.1.5.1 Normal working conditions at the BA, NAL, and associated worksite facilities entail risks associated with heavy industrial, facility maintenance and animal / plant agriculture.

C.1.5.2 BARC and NAL’s normal business hours are 5 days per week, Monday through Friday (excluding federal holidays), from 0800 to 1630 EST / EDT. USNA’s normal business hours are 7 days a week, each day of the year (except December 25), from 0800 to 1700 EST / EDT. Some services are required 24 hours a day, 7 days a week each day of the year (24/7) schedule, before and after hours, weekends and holidays, as well as availability for emergency call-back. The SP shall comply with these work scheduling requirements.

C.1.5.3 Federal holidays are listed below for information. Should a Federal holiday fall on a Saturday, the Friday immediately before is considered the holiday. If the Federal holiday falls on a Sunday, the Monday immediately following is considered the holiday. The SP shall provide sufficient staff to satisfy PWS requirements on holidays as well as provide for emergency call-back.

NEW YEARS DAY	LABOR DAY
M.L. KING JR BIRTHDAY	COLUMBUS DAY
PRESIDENTS’ DAY	VETERANS’ DAY
MEMORIAL DAY	THANKSGIVING DAY
INDEPENDENCE DAY	CHRISTMAS DAY
Other days or partial days designated by Federal statute, Executive Order, Presidential Proclamation, or the facility Director.	

C.1.5.4 At **NO** time will the full operation of the facility shut down or cease operation. Any BA, NAL, and associated worksite area closure announcement shall not pertain to the SP unless confirmed by the SP Project Manager. Specific areas are required to be supported on-site and kept in operation continually. SP Personnel are required to fulfill duties regardless of situation. The SP shall coordinate scheduled maintenance and test shutdowns with authorized facility personnel 10 business days prior to any interruption. Utility services shall be provided for maintenance and test-related SP shutdowns. In an effort to minimize the disruption of research and prevent exposure of Government employees to irritating fumes and noises, the maintenance and test-related shutdowns shall be conducted on weekends or holidays. Sole responsibility and liability falls to the SP for lost research (information and research animals, foliage, and specimens) and equipment malfunctions at the BA, NAL, and associated worksite facilities due to neglect or inadequate personnel supply. “Essential” and call-back personnel (e.g., those who perform duties on weekends, holidays and during bad weather, disaster and budgetary shutdowns) must have the temperament, ability, and transportation resources to comply.

C.1.5.5 The SP shall practice energy conservation in accordance with the Energy Management Program written by the SP in accordance with applicable executive and congressional mandates. The SP shall coordinate with researchers prior to implementing energy conservation measures in order that research-mandated conditions are not altered.

C.1.5.6 Weather conditions in the BA vary with an average annual rainfall of 41 inches, with the wettest months being April through July, and an average annual snowfall of 18 inches, with snow expected from around October through April. The average frost-free period (growing seasons) during the year is about 250 days. The first killing frost may be expected about October,

and the last killing frost generally occurs in May. The average annual maximum and minimum temperatures are approximately 65°F and 45°F, respectively. Monthly normal temperatures range from 23°F in January to 86°F in July. Summer temperatures often reach above 90°F, while winter temperatures commonly drop below freezing. The prevailing wind direction is northwest with an average annual wind speed of 9 miles per hour.

C.1.6 QUALITY CONTROL

C.1.6.1 The SP shall implement an approved Quality Control Plan (QCP). The Government will monitor and evaluate the performance of the SP under the contract resulting from this solicitation. The SP shall review and provide annual updates for any changes no later than October 15 of each performance fiscal year.

C.1.7 PHYSICAL SECURITY

C.1.7.1 The SP must comply with USDA, ARS, BA, NAL, and associated worksite security policies and procedures and any other security measures or directives that are implemented for the protection of personnel, animals, facilities, research materials, and other Government assets. The SP shall be responsible for safeguarding Government property and equipment provided for use at the appropriate facility. The SP shall provide security training on facility area policies and procedures to SP personnel and shall participate in Government-provided security awareness training that is periodically required for employees. While at the BA and NAL the SP's staff shall comply with the legal instructions of the BA, NAL, and associated worksite security personnel.

C.1.7.2 The SP personnel shall achieve appropriate background investigations conducted by the Government. As a minimum, all SP personnel shall successfully complete a National Agency Check with Inquiries (NACI). Personnel working in areas that provide access to Code of Federal Regulations (CFR)-listed select agents and toxins shall undergo a Department of Justice (DOJ) / Federal Bureau of Investigation (FBI) Security Risk Assessment as well as satisfy a background investigation conducted by the Office of Personnel Management (OPM). The SP shall maintain a current listing of their employees to include employee's name, social security number, and level of background check. The list shall be provided to the COR prior to start date. Updated listings shall be provided when an employee's status or information changes. The SP shall ensure sensitive information (e.g., Privacy Act information) is properly marked and protected from unauthorized access, disclosure, or manipulation.

C.1.7.3 The SP shall ensure SP employees are issued USDA-approved pass and badge identification. Approved identification shall be displayed at all times. For safety reasons and with the approval of COR, the SP personnel that is required to perform tasks around machinery or other equipment that could take hold of identification badges may implement a system to identify the personnel as BA or NAL employees. In such a case, the employee shall have in possession the issued identification at all times in addition to the approved safety implemented system.

C.1.7.4 The SP shall report to an appropriate authority any information or circumstances about which they are aware that may pose a threat to the security of USDA personnel, SP personnel, facilities, resources, and sensitive or unclassified information.

C.1.7.5 The SP shall maintain key / card / combination control procedures in accordance with applicable directives and policies in Appendix A, Publications. Sharing of keys / keycards is a violation of this statement. The SP shall immediately report lost or stolen keys and proximity cards to appropriate Government officials. In the event of an employee's termination, all keys and keycards shall be returned to the COR in accordance with **C.1.4.3**.

C.1.8 SAFETY, HEALTH, AND ENVIRONMENTAL PROTECTION

C.1.8.1 ACKNOWLEDGEMENT OF RISKS

C.1.8.1.1 The SP shall provide its personnel with full and realistic information pertaining to the potential hazards of their work at the BA, NAL, and associated worksites. The SP is responsible for its employees' compliance with health and safety procedures and is liable for any consequences of its employees' failure to comply with known or common sense health and safety procedures or practices. Work assignments at the BARC facility, both in facility support and animal care positions, entails risks from working in and outdoors, with machinery, equipment pesticides, animals and zoonotic pathogens. Workers at BARC can be subject to disagreeable odors, physical injury from animals, insect bites, and poisonous plants. Psychological trauma can result from handling or viewing diseased animals.

C.1.8.1.2 The SP shall (prior to start date) require each of its employees to execute documentation acknowledging that he / she has been advised of the risks of working in the research environment at the BA, NAL, and associated worksites. Prior to performing duties on the facility, a copy of the acknowledgement shall be provided to the COR.

C.1.8.2 COMPLIANCE

C.1.8.2.1 The SP shall actively support the BA, NAL, and associated worksites' safety, health, environmental protection, and hazardous waste programs by ensuring compliance with Federal, state, and local environmental, safety, and health laws and regulations, and the associated USDA, ARS, BA, NAL, and associated worksites directives, policies, and procedures (such as safety, emergency management, "Open Flame") cited in Appendix A, Publications.

C.1.8.2.2 The SP shall allow access to areas under SP control for environmental inspections to determine compliance with Federal, state, and local environmental policies, regulations, and procedures. For any discrepancy identified, the SP shall have 24 hours, or less depending on the violation, to initiate corrective action to avoid shutdown of operations if discrepancies could lead to environmental violations. If the SP is aware of a regulatory authority being onsite for a compliance visit or inspection, then the appropriate government representative (i.e., from wastewater treatment plant, an environmental specialist, etc.) must be notified immediately to accompany the visitor. Any records requested by a regulatory authority must be produced in the timeframe imposed by that authority.

C.1.8.2.3 The SP shall be solely liable for acts of omission in regard to compliance with Federal, state, and local environmental statutes, regulations and applicable guidelines which lead to fines, penalties, or costs associated with enforcement actions, removal actions, corrective actions, or remedial actions. The SP shall assume full liability for the release of any hazardous substance to air, soil, or water resulting from its own or its subcontractor's actions. The SP shall be responsible for the costs associated with the cleanup of any such release. In the event the SP is removed from the duties at the facility, the SP shall also be responsible for latent defect caused while performing tasks while on property. The Government retains the right to initiate and complete cleanup actions for which the SP shall reimburse the Government for costs associated with cleanup and disposal.

C.1.8.3 OCCUPATIONAL SAFETY, HEALTH, & ACCIDENT PREVENTION

C.1.8.3.1 The SP shall perform the requirements of the PWS in compliance with Federal, state, and local safety and health laws and regulations. The SP shall comply with the Occupational Safety and Health Act (OSHA) (Public Law 91-596) and the resulting OSHA Standards 29 Code CFR 1910 and 1926 to protect Government resources and the general public. The SP shall follow OSHA criteria as they pertain to occupational safety and health for its employees. The SP shall take additional precautions to prevent accidents and damage to Government property, facilities, and equipment, or injury to Government employees. The SP shall be subject to OSHA inspections and citation resolution shall be the responsibility of the SP.

C.1.8.3.2 The SP shall formulate, submit, and maintain a written safety and health plan. The written plan shall include the details of the SP's safety organization, responsibilities, method of program implementation, occupational health maintenance plan, emergency response plan, and how corrective actions will be accomplished. A copy of the approved safety plan will be provided to the CO. The SP shall have a central point of contact for safety and health related issues, preferably the project manager or a designated representative.

C.1.9 REPORTS

C.1.9.1 The SP shall provide to the COR all mandated reports required in the statement. All reports shall contain complete and accurate information and results. Refer to Appendix D, Required Records and Reports for a listing of required reports and frequency in which the reports shall be provided.

C.1.10 TRANSITION / PHASE-IN PLAN

C.1.10.1 To ensure a smooth phase-in to SP performance and to prevent possible decreases in productivity or service quality, the Government will allow the SP a 60 calendar day phase-in period. The Government will provide the SP with access to all facilities from the start of phase-in.

During phase-in, the Government will make available to key SP personnel, Government representatives familiar with the operations, processes, and functions to be performed. This service is being made available to explain procedures for conducting Government business, show the SP the various work sites, and introduce the service provider to customer representatives. The SP shall become familiar with the Contract requirements in order to commence full performance on Contract start date. The Government will provide familiarization training of various Government organizations to the service provider should the Government determine that such familiarization training is necessary. As a minimum, the SP shall familiarize its supervisors, key personnel and staff with existing equipment, reporting, work scheduling and procedures. During the phase-in period, the SP shall be responsible for finalizing all employee clearance requirements. The SP shall complete the necessary steps for assumption of the operation during the phase-in period and shall meet all requirements as specified in the PWS with the beginning of full performance.

C.1.10.2 The Government will cooperate to make its personnel available for interviews under the Right-of-First-Refusal process. However, this availability is limited due to the Government's continuing responsibility for performance during the phase-in period. The Government will make every reasonable effort to make personnel available for hiring, based on the approach for phase-in to contract operations as detailed in the Phase-in Plan.

C.1.10.3 To ensure a smooth phase-out to the next SP and to prevent possible decreases in productivity or service quality, the SP shall provide a 60 calendar day phase-out period prior to Contract termination date. During this period, the SP shall make available to key incoming SP personnel, representatives of the incumbent SP who are versed in the operation of the functions to be performed. This service shall be made available to explain procedures for conducting Government business show the next SP various work sites, introduce the next SP to customer representatives, etc. During this period, the incumbent SP shall provide required training and conduct material, equipment, and tools transfers. Inventories shall be conducted jointly with the Government representatives and representatives of the incoming SP.

C.1.11 AGENCY PROGRAMS

C.1.11.1 ENERGY SAVINGS PERFORMANCE CONTRACTS

C.1.11.1.1 The SP shall participate and be an active component in the Energy Savings Performance Contracts (ESPC) at BA and NAL. The SP shall be responsible for the overall coordination of ESPC project implementation and contract compliance. The ESPC is a tool provided by the President of the United States and Congress to federal facility managers to use as a fast track for upgrading their unfunded facilities' energy savings programs.

C.1.11.1.2 The Government has entered into a service contract with an outside contractor to evaluate, design finance, install and maintain energy saving equipment. In return, the contractor will be compensated based on the performance of various project performance and effectiveness in achieving the guaranteed savings. The ESPC provides an alternative method of implementing energy saving projects when installation resources such as staff, technical expertise, or funding are not available.

C.1.11.1.3 A preliminary technical and economic analysis was conducted to determine with certainty and suitability of identified energy conservation measures (ECM) in the contract. A detailed energy study result indicated primary ECM's based on component's ability to achieve a reduction in operating costs and the contractor's ability to obtain an acceptable return on investment. ESPCs were authorized in the 1986 amendments to the National Energy Conservation Policy Act of 1978 and further amended by the Energy Policy Act of 1992.

C.1.11.1.4 The ESPC will be conducted in phases. The first phase shall consist of the following projects (Start Date (SD) / Completion Date (CD)):

- Lighting Improvements (Estimated date: SD 10.1.02 / CD 3.1.05)
- Steam Trap Replacements (Estimated date: SD 10.3.03 / CD 10.22.05)
- Steam and Condensate Pipe Insulation (Estimated date: SD 10.3.03 / CD 10.22.05)
- Reset Condensate Water Temperature (Estimated date: SD 1.18.05 / CD 10.22.05)
- Fume Hood Controls (Estimated date: SD 1.2.04 / CD 5.15.05)
- Building 161 HVAC Upgrade (Estimated date: SD 10.1.03 / CD 8.24.05)
- Extension of Water Lines to the BARC West (Estimated date: SD 10.6.03 / CD 1.30.06)
- Alkaline Hydrolysis (Estimated date: SD 10.1.03 / CD 2.24.05)
- Federal Drug Administration (FDA) and Department of State (DOS) sewer to BARC (Estimated date: SD 10.6.03 / CD 6.6.06)

Note: Possible schedule modifications and implementation adjustments may be necessary.

C.1.11.2 ENVIRONMENTAL PROTECTION AND MANAGEMENT POLICY

C.1.11.2.1 The SP shall participate in the BA programs under the Environmental Protection and Management Policy based on Executive Order (EO) 13148, Greening the Government Through Leadership in Environmental Management. The SP shall demonstrate commitment through the following:

- Adherence to applicable regulations of Federal, state, and local Governments, policies, and procedures of USDA, ARS, and Executive Orders,
- Participation in the Environmental Management System, and
- Advancement of stewardship of natural resources by using sound management systems and research support to reduce impacts of agricultural production on the Chesapeake Bay Watershed, integral with Pollution Prevention Program.

C.1.11.3 ENVIRONMENTALLY PREFERABLE PRODUCTS & AFFIRMATIVE PROCUREMENT POLICY

C.1.11.3.1 The SP shall participate in the Environmentally Preferable Products and Affirmative Procurement Program during the pursuit of purchasing. Green purchasing / affirmative procurement includes but is not limited to recycled-content products, biobased products, and energy-efficient products.

C.1.11.3.2 The legal authority for affirmative procurement derives from Resource Conservation and Recovery Act (RCRA) Section 6002. This act requires Federal agencies to give preference in their purchasing programs to products and practices that conserve and protect natural resources and the environment. The Federal Biobased Procurement Program was authorized by Section 9002 of the 2002 Farm Bill. The USDA is currently developing a model procurement preference program for designated biobased products. Once implemented, the SP shall comply with the program. Meanwhile, the facilities covered in the PWS are participating in the Environmentally Preferable Products and Affirmative Procurement Program developed at BARC and the SP shall abide by the program.

Other authorities include:

- Federal Acquisition Regulation (FAR), Parts 7, 23, 36, and 52;
- EO 13148, Greening the Government Through Leadership in Environmental Management;
- EO 13101, Greening the Government Through Waste Minimization, Recycling and Federal Acquisition;
- EO 13123, Greening the Government Through Efficient Energy Management

C.1.11.3.3 In order to comply with the affirmative procurement requirements of the above authorities, the facility strongly promotes the use of recycled and recovered materials identified in the Environmental Protection Agency (EPA) comprehensive Procurement Guidelines (<http://www.epa.gov/epaoswer/non-hw/procure/index.htm>). These items are seen as the minimum that should be considered when evaluating recycled / reuse materials. The SP will use biobased and energy-efficient products recommended by EPA and the Office of the Federal Environment Executive. The only time these products should not be considered is when they are cost prohibitive, not available within the required time frame, or fail to meet necessary performance standards.

C.2 SPECIFIC TASKS / REQUIREMENTS

C.2.1 GENERAL INFORMATION

C.2.1.1 The SP shall provide a broad range of services dedicated to providing facility resource management planning and programming for BA, NAL, and associated work sites. The purpose is to produce attractive, functional, safe, and code-compliant facilities through goals and objectives established in the USDA with minimal programmatic losses, loss of facilities, and injury / harm to research and infrastructure. Facility planning must ensure optimal functional use of land areas and facilities. Tasks and requirements include the performance of the duty and any necessary travel, planning, preparation, set-up, and job / task evaluations. The SP shall be responsible when system changes are implemented for providing necessary analysis, documentation, and posting to the system(s) to ensure the integrity and validity of the database(s).

C.2.2 AREA MAINTENANCE

The SP shall provide necessary trade services for the facilities and associated entities. The SP shall be responsible for but is not limited to the following requirements:

	BARC	USNA	NAL	PI/CM	CNJ	Mc	GD	USSS	A 580
C.2.2.01 Alteration and Renovation	X	X	X	X	X		X	X	
C.2.2.02 Central Heating Plant(s) and Heat Distribution Systems	X	X	X				X		
C.2.2.03 Chemical Fume Hoods	X	X		X	X		X		
C.2.2.04 Direct Digital Control	X	X	X						
C.2.2.05 Electrical Utilities	X	X	X	X	X		X	X	
C.2.2.06 Electronics	X	X	X				X		
C.2.2.07 Elevator Service and Maintenance	X	X	X						
C.2.2.08 Fence and Entrance Systems	X	X	X	X	X		X		
C.2.2.09 Greenhouse Maintenance	X	X					X		
C.2.2.10 Grounds Maintenance	X	X	X				X		X
C.2.2.11 HVAC	X	X	X	X	X		X		X
C.2.2.12 Manure Removal Systems	X								
C.2.2.13 Metal Fabrication	X	X	X	X	X		X		
C.2.2.14 Plumbing / Pipefitting	X	X	X	X	X		X	X	X
C.2.2.15 Preventive Maintenance	X	X	X					X	
C.2.2.16 Refrigeration Systems	X	X	X	X	X		X		
C.2.2.17 Signage	X	X	X	X	X		X		
C.2.2.18 Smoke / Fire Service Maintenance and Detection	X	X	X	X	X		X		
C.2.2.19 Unfired Pressure Vessels	X	X	X	X	X		X		
C.2.2.20 Warning / Traffic Signal Mtnce.	X								
C.2.2.21 Water & Wastewater Treatment Sys	X		X					X	X
C.2.2.22 Water Quality Laboratory Services	X	X	X					X	

BARC - Beltsville Agricultural Research Center; USNA - U.S. National Arboretum; NAL - National Agricultural Library; PI/CM - Presque Isle, ME and Chapman, ME; CNJ - Chatsworth, NJ; Mc - McMinnville, TN; GD - Glenn Dale, MD; USSS - U.S. Secret Service; A 580 - Animal Plant Health Inspection Services located in BARC building #580

C.2.2.01 ALTERATION AND RENOVATION

C.2.2.01.1 Provide alteration and renovation services for the facility buildings, wood and non-wood structures, and fixtures in accordance with local building codes, accepted trade methods and techniques, ARS Manual 242.1 Construction Project Design Standard (August 30, 1991), and the Public Buildings Act 40 USC 12. These services are an effort to increase facility efficiency, safety, accreditation, and other code related requirements. Associated services shall include but are not limited to carpentry, painting, masonry, and roofing. The term “alter” includes repairing, remodeling, modifying, improving, extending, or other changes in a structure. The terms “construct” and “alter” include preliminary planning, engineering, architectural, legal, fiscal, and economic studies, surveys, designs, plans, working drawings, specifications, procedures, and other actions necessary for the task. “Fixtures” shall include but are not limited to animal housing units, module units, breezo systems, plastic animal holding cages of various sizes and shapes, shelves, floor and wall cabinets, base units, shipping cartons, furniture, tables, benches, flooring systems, countertops, draperies / blinds, awnings, doors and doorframes, staircases, windows, window frames, window hardware, ceilings, bulletin / information boards, sinks, peg boards, exhibit spaces, and other items to meet research.

C.2.2.01.2 Prepare, paint, decorate, and refinish interior and exterior facility surfaces, equipment, furnishings, and utilities in a manner as not to show peeling, cracking, chipping, running, flaking, or misses. Ensure high contamination areas (laboratories, animal facilities, and equipment) are properly finished to allow proper decontamination. Ensure paint (lead-free, least toxic, odorless (interior surfaces), and biobased (as available)) and refinishing products conform to National Electrical Code (NEC), National Fire Protection Agency (NFPA), facility, and special occupancy requirements. Maintain a Material Safety Data Sheet (MSDS) for paint and other refinishing products. Protect and ensure that equipment, labels, research products and livestock, and furnishings are not painted or affected by the paint process. Ensure equipment and furniture is removed or protected during the task. Maintain parking lot and pavement markings.

Performance Objective	Threshold
Ensure all paint meets all applicable safety standards and conforms to all policies.	100% Compliance

C.2.2.01.3 Install, maintain, repair, and modify roofing systems to prevent leaks and damage to facility and equipment. Install and maintain cornices, gutters, underground rain leaders, downspouts, caps, flashing, emergency / roof access doors, skylights. Ensure gutters, downspouts, and underground rain leaders are free from debris to prevent standing water that may lead to building flooding or other water related damage. Standing water shall be minimized as much as possible to prevent standing water that may harbor insect breeding. Respond to emergency roof situation 24/7.

Performance Objective	Threshold
Take proper measures to ensure building contents are protected from possible damage.	100% Compliance

Performance Objective	Threshold
Report within 30 minutes of the notice to analyze, evaluate, and troubleshoot emergency roof conditions.	100% Compliance

C.2.2.02 CENTRAL HEATING PLANT(S) AND HEAT DISTRIBUTION SYSTEMS

C.2.2.02.1 Maintain and safely operate the central production plants, facility heating equipment, and the associated distribution systems to provide a 24-hour uninterruptible steam supply. Maintain records and reports required to operate and maintain the central steam production, facility heating, and other designated equipment. Make records readily available for Government use. Operate the facility as an “essential” and critical operation. Ensure that the operation is staffed 24/7, regardless of circumstances, to provide physical monitoring and emergency response.

Performance Objective	Threshold
Maintain and operate the central steam production plants, heating equipment, and the associated distribution systems to provide a 24-hour uninterruptible steam supply.	100% Compliance

C.2.2.02.2 Ensure personnel who are tasked with operation and maintenance of boilers possess a current Stationary Operators License for applicable jurisdiction; the horsepower of the equipment operated determines the level of the personnel’s certification.

C.2.2.02.3 Be familiar with and adhere to regulations governing the Clean Air Act of 1990 and any applicable laws mandated by the Environmental Protection Agency (EPA) and the MDE. Perform regular tests and sample the emissions produced by the boilers. Adjust the boilers to

ensure that the plant equipment operates to established standards of the governing agencies. Assist with the annual emissions report to the State of Maryland. Contact proper authorities in case of fuel oil spills, gas leaks, water main breaks, or major property damage and contain the spills, leaks, and breaks as necessary.

C.2.2.02.4 Implement and adhere to plant maintenance procedures that include safe start-up, control, operation, and shutdown. Ensure the system produces the appropriate thermal demands and remains environmentally compliant during the production and distribution of steam, hot water, and warm air. Ensure proper inspection and maintenance of primary and ancillary equipment and system functions, including but not limited to production, production control, distribution, pumping, emission control, water treatment, and fuel supply. Ensure that the boilers are suitable for expected loads, temperature, and capacity. Test combustion control devices, pressure and high limit controls, and over pressure devices on a predetermined basis.

C.2.2.02.5 Inspect boilers, auxiliary equipment, and steam lines for operation and preventive maintenance purposes. Inspect and adjust equipment controls as indicated; lubricate, overhaul, and repair as necessary. Check meters, gauges, pressure relief valves, and other instruments and adjust equipment controls as indicated. Fire up boilers and secure as required by demand requirements. Perform preventive maintenance and repairs to steam and return system within the

main power plants and outlying buildings. Systems include but are not limited to steam mains, reducing stations, expansion joints, high and low pressure steam traps, condensate pumps, feed water pumps, sump pumps, and other equipment related to steam and heat production. Perform preventive maintenance and repairs to boilers and boiler plant equipment including burners, pumps air compressors, fans, motors, feed water heaters, feed water regulators, valves, magnetic switches and relays, motor generator sets, programmers, microprocessors and other controls. Typical repairs involve replacing pipe and fittings on equipment, adjusting and packing glands on various types of valves, fitting and replacing worn parts on equipment such as but not limited to bushings and bearings in electric motors, valves and repairing and renewing parts, adjusting clearances and repairing or replacing boiler refractory. Maintain daily records of temperature readings, feed water temperature, boiler pressures, feed water used, amount of condensate return, water used by plant, and fuel used and quantities that are in reserve. Maintain piping, distribution, pressure valves, boilers, furnaces, and other items in accordance with the appropriate craft and utility code, American National Standards Institute (ANSI), American Society of Heating, Refrigeration, and Air Conditioning Engineer (ASHRAE) standards, and the American Society of Mechanical Engineers (ASME).

Performance Objective	Threshold
Perform all necessary tasks to required boilers and equipment in order to pass annual inspections.	100% Compliance

C.2.2.02.6 Establish and maintain written instructions for the operation of steam production plants and heating equipment. Comply with the appropriate standards, state and local codes, and the equipment manufacturer's recommendations. Address equipment start / shutdown, operational adjustments, and emergency and safety precautions. Ensure planned shutdowns and overhaul work on equipment such as boilers, hot water generators, distribution, and pressure vessels occurs when scheduled. Request approval from the COR to deviate from this procedure, such as in an emergency.

C.2.2.02.7 Operate and maintain water treatment equipment affecting the central plant and distribution system and provide sampling and analysis / test services to meet the various requirements. Provide proper water chemistry for plant operations. Test files shall include the type of test, results, date and time performed, and name of person who performed the test. Ensure that procedures used to conduct tests are in accordance with applicable directives and maintain appropriate laboratory record files for tests performed. Assure that the tests are performed at least once in each 8-hour period.

Performance Objective	Threshold
Maintain boiler water treatment program to duty status boilers to ensure proper water chemistry.	95% Compliance.

C.2.2.02.8 Abide by the guidance of the SP energy conservation personnel or direct instructions from the utility provider to follow mandatory fuel use compliance. Utility fuel sources consist of fuel oil, biodiesel, and natural gas. A Potomac Electric Power Company (PEPCO) energy curtailment could result in switching to generators and co-generators. Services shall be switched due to two possibilities: Energy Conservation Program or utility service

provider mandate. In the case of the latter, the utility provider shall notify the BARC primary plant. The primary plant shall then notify the energy conservation personnel, who in turn shall contact operators at the NAL and USNA. Switch over fuel source within 1 hour of notification from the utility provider. The SP shall then notify a designated Government representative of the switch over. Failure to switch the fuel source as required by the utility provider within the allotted time possesses a monetary fine to the Government. In a situation where the fines are levied, the SP shall bear the cost.

Performance Objective	Threshold
Switch over fuel source within 1 hour of notification from energy conservation personnel or the utility provider.	100% Compliance

C.2.2.03 CHEMICAL FUME HOODS

C.2.2.03.1 Maintain and test facility chemical fume hoods. Conduct repairs, intervening maintenance, and emergency service of the chemical fume hoods. Maintenance of the hoods includes but is not limited to controls, exhaust, fan sets, bearings, air filters, motors, electrical connections, plumbing, ductwork, starters, equipment leveling, measuring intensity of lights, and proper operation of lights, water, gas, air, and vacuum outlets. Decontaminate equipment systems and components. Detoxify, change, and appropriately dispose of filters at scheduled frequencies or in the event of an emergency. Fumigate as necessary prior to disassembly.

C.2.2.03.2 Conduct annual on-site certification / testing for each chemical fume hood at time of installation and annually thereafter in accordance with the most current ARS Manual 242.1, Chapter 9, Part 6 of the Construction Project Design Standard (August 30, 1991). Perform certifications once each year and within one year of the last certification. Certify equipment on a scheduled annual basis regardless if the piece of equipment may have been certified previously in the same year due to warranty or service calls.

Performance Objective	Threshold
Conduct annual on-site certification / testing for each chemical fume hood at time of installation and annually thereafter in accordance with the most current regulations.	100% certification compliance for each chemical fume hood.

C.2.2.03.3 Document flow readings, hood functionality, and condition of each fume hood. Documentation shall consist of but is not limited to certifications or inspections, test results, cabinet decontamination, leak test results, velocity profile and exhaust measurements, light intensity measurements, pressure leak test results, leveling of cabinets, ground fault interruption and ground interrupter test, noise level test, light intensity test, inventory number, manufacturer, manufacturer serial number, location, telephone number of user, and name of laboratory and institute, and record of repairs and parts replacement accomplished. Documentation shall be kept for a minimum of 3 years.

C.2.2.04 DIRECT DIGITAL CONTROL

C.2.2.04.1 Provide technical expertise and operational support (excluding NAL) for facilities that have integrated Direct Digital Control (DDC) computer building management systems to include related software upgrades. Provide a high level of qualified technical service support to ensure the integrity and reliability of the equipment and protect facility investments. Ensure minimum downtime. Install, operate, maintain, trouble-shoot, and repair complex environmental computer control and monitoring systems (ECMS) for Heating Ventilation Air Conditioning (HVAC), alarms, and other mechanical equipment that are incorporated into the laboratories, greenhouses, special purpose and office facilities. This includes the installation of associated communication lines, such as telecommunications, fiber optics, panels, and associated components. Interpret, select, adopt, and modify programs; apply numerous technical specifications and engineering guidelines and operating principles related to the complex HVAC, greenhouses, and special purpose control systems and computer equipment such as Siemens, Insight 600, Direct Digital Control Programming, Robertshaw, Q-Com, Wadsworth, and Staefa.

Performance Objective	Threshold
Maintain equipment and network with required software updates. Attend all update training classes required by equipment manufacturer.	100% Compliance

C.2.2.04.2 Maintain the environment of special purpose areas (plant growth chambers, rooms and greenhouses, animal rooms, insect rooms, vegetable storage rooms, and laboratory environments) to a predetermined critical temperature of plus or minus 2 degrees Fahrenheit (F) (1.1 degree Celsius (C)) and a relative humidity of plus or minus 5 percent. The NAL 5th floor special purpose area shall be maintained to a predetermined critical temperature of plus or minus 1 degree F (0.5 degree C) and a relative humidity of plus or minus 2 percent. Work in conjunction with scientific personnel to produce the specific environmental conditions required to support research programs including modifying, repairing, and maintaining control systems for specialized laboratory equipment such as freeze dryers, refrigerated centrifuges, reverse cycle heat pumps, and cascade systems, and climatic controls and systems including requirements for dust controls, negative and positive pressurized areas, constant temperature and humidity areas, and greenhouses.

Performance Objective	Threshold
Maintain special purpose areas to ensure a predetermined critical temperature and relative humidity level. <i>Temperature:</i> +/- 2 degrees F (1.1 degree C) of required temperature <i>Relative Humidity:</i> +/- 5% of required relative humidity <i>NAL 5th floor Temperature:</i> +/- 1 degrees F (0.5 degree C) of required temperature <i>NAL 5th floor Relative Humidity:</i> +/- 2% of required relative humidity	100% Compliance

C.2.2.04.3 Maintain records and logs of pertinent information regarding modifications, maintenance, operating characteristics, and repairs made to the control logic and systems. Prepare correspondence, estimates, status reports, and schedules to complete assignments. Calculate heat loads, humidity and refrigeration requirements. Prepare sketches, circuit diagrams, blueprints, and specifications.

C.2.2.05 ELECTRICAL UTILITIES

C.2.2.05.1 Operate and maintain the electricity and the electrical back-up generation systems (fixed and portable) to ensure electrical services to the facility and ensure uninterrupted service to the critical facilities. Load test and perform preventive maintenance on emergency generators at minimum once monthly. Operate and maintain electrical utilities in accordance with NEC; OSHA; North American Free Trade Agreement (NAFTA); Maryland High Voltage Act; BA, NAL, and associated worksite standard operating procedures; Federal, state, and local regulations, guidelines, and required permits associated with the operations; original equipment manufacturers' recommendations and specifications; equipment warranties; and sound industry practices. Be responsible for ranges of voltages (low, standard, and high), amperages, phases, and frequencies. Ensure that each personnel possess the required certifications. Provide a localized Master Electrician to oversee and be responsible for electrical tasks at BARC. The Master Electrician shall possess a nationally recognized Inspector Certification certificate. Load test and perform preventive maintenance on emergency generators at minimum once monthly.

Performance Objective	Threshold
Provide electrical utilities 24/7 to ensure uninterrupted service to critical facilities.	100% Compliance
(NAL) Respond 24/7 to power failures within 1 hr to ensure that services can be reactivated within an acceptable timeframe in order to determine if the facility can be returned to full operation before the next working day.	100% Compliance

C.2.2.05.2 Construct, maintain, repair, inspect, troubleshoot, load test, and service the facility electrical systems and equipment. Perform support for but not limited to basic electrical services (outlets and switches), overhead and underground electrical primary and secondary distribution lines and high voltage systems, high voltage transformers, switchboards, panels, circuits, fixtures, controls, fire alarm systems, detection surveillance systems, high intensity lighting, furnaces, light bulb and ballast replacement. Support additions and modifications to existing facilities. Service, repair, maintain, and install shop, farm (grain bins, barn cleaners, dairy vacuum pumps, hay elevators, milk impellers, hay blowers, conveyors, molasses pump, lift stations, insect eliminator controls, and frost free animal water providers), kitchen (convection ovens, meat grinders, mixers and blenders, meat stuffers and slicers, bowl choppers, garbage disposals, microwaves, ranges, food warmers, percolators, scales, and produce washers), laboratory, and research equipment and appliances (motors, ovens, furnaces, air compressors, balances, solution shakers, and other standardized and special equipment that are electrically operated, connected, and controlled).

C.2.2.05.3 Conduct electrical audits and modify electrical capacity and electrical components to accommodate additional load or equipment if the audit reveals that the system is insufficient to handle requirement. Maintain electrical distribution system to supply sufficient power requirements to the facility. Clear right-of-ways and layout, repair, and install distribution lines (set and anchor poles, set cross arms and support, string wire, install components). Install transformers, lightening arrestors, insulators, metering equipment, and lighting (to include street lights, parking lot lighting, intrusion deterrence lighting).

Performance Objective	Threshold
Maintain electrical distribution system to supply sufficient power requirements to the facility.	95% Compliance

C.2.2.05.4 Monitor weather to anticipate possible power failure to avoid interruption of facility power. Switch to back-up electrical generation system as required to provide continuous supply and service.

C.2.2.05.5 At the completion of the facility improvements structured by the ESPC, the SP shall maintain the new lighting systems in accordance with established guidelines set forth by the energy personnel. The guidelines shall establish replacement procedures and new energy savings light bulbs and ballasts to be utilized for replacement. Once equipment warranties have expired, the SP shall assume all maintenance requirements and responsibilities of improvements.

C.2.2.06 ELECTRONICS

C.2.2.06.1 Maintain, trouble-shoot, and repair office and laboratory equipment for facility research programs and support services. Electronic services shall include but are not limited to rewiring and replacing electrical cords, setting-up of laboratory equipment (hardware and software installation, calibration, changing or repairing components, preventive servicing, lubrication, adjusting, and cleaning equipment), and training laboratory personnel on proper care. The inventory of laboratory equipment is in excess of 3,000 items and includes but is not limited to incubators, sterilizers, high and moderate speed centrifuges, vacuum pumps, water baths and stills, central facility reverse osmosis water and laboratory filter purification systems, compressed gas regulation systems, and personal computer interfaces programmable logistical controllers).

Performance Objective	Threshold
Maintain research support equipment for proper operation.	95% Compliance

C.2.2.07 ELEVATOR SERVICE AND MAINTENANCE

C.2.2.07.1 Maintain, assess, recommend or perform repairs / renovations and safety inspections, and as needed, assist technical personnel with the operation of the facility elevators, outside lifts (including hydraulic loading docks and ramps), dumbwaiter, and book lift systems in accordance with the latest edition of ANSI / AMSE 17.1 and 17.2 equipment specifications and manufacturer's instructions. Elevators and lifts shall be certified as required by a certified inspector. Respond to emergency situations 24/7 and make appropriate repairs to re-instate elevator services.

Performance Objective	Threshold
Respond to emergency elevator situations within 20 minutes of notification to analyze, evaluate, troubleshoot, and evacuate trapped individuals.	100% Compliance
Provide a qualified elevator technician on scene within one hour as necessary and remain on sight until the problem is resolved.	100% Compliance

C.2.2.08 FENCE AND ENTRANCE SYSTEMS

C.2.2.08.1 Install, maintain, mend, and repair the facility perimeter, security, and ornamental fencing and entrance systems. Entrance systems refer to doors (standard, overhead, and automatic), gates (manual and automatic) and associated hardware which may be electronic / motor driven or manual operation. Systems are located both exterior and interior (in laboratories, animal pens and rooms). Ensure automatic gate systems are lubricated and free of snow, leaves, and other debris that will prohibit the gate from operating properly. Assist in the design and layout of the fencing systems, survey boundaries, and locate utility lines, drains, and other obstacles. Respond to security gate and fence alarm situations 24/7.

Performance Objective	Threshold
Respond to security gates issues within 1-hour of notification to analyze, evaluate, and troubleshoot and remain until problem is resolved.	100% Compliance

C.2.2.09 GREENHOUSE MAINTENANCE

C.2.2.09.1 Construct, inspect, maintain, modify, and repair the facility greenhouses. Services may include applying and removing glazing and shading, glasswork, mechanically and electronically-controlled mechanical venting systems, shade-cloth systems, mist propagation systems, biotherm tubing systems, general upkeep (including rack and pinion vents), installation and removal of temporary “hoop” and “poly houses”, plumbing, lighting, entrance / exit, and temperature / humidity control. Perform these duties in accordance with specifications provided by the facility staff, normally by the greenhouse manager and laboratory researchers.

Performance Objective	Threshold
Support all greenhouse operations to comply with guidelines and specifications provided by the facilities staff and research community.	95% Compliance

C.2.2.09.2 Perform tasks within the greenhouses, taking special attention so as not to disrupt, damage, or destroy any research inside the confinements. Maintain a close communication with the research staff. Coordinate with greenhouse research leaders for temperature adjustments

during cold season to minimize snow accumulation on the structures. Some greenhouses require special guidelines due to the research involved. To enter biological select agent greenhouses, personnel shall possess DOJ / FBI background investigations, wear proper personal protection equipment (PPE), and follow shower-in / shower-out procedures. Adhere to specific information and guidelines provided by the Government.

C.2.2.10 GROUNDS MAINTENANCE

C.2.2.10.1 Turf Care

C.2.2.10.1.1 Monitor turf growth and schedule mowing operations in order to sustain proper and acceptable average grass height of 3 ½ inches (5 inches at USNA) while leaving no patches or uncut grass or preclude scalping. However, authorized facility officials may request more frequent or special mowing parameters for special events and programmatic needs that may conflict with SP mowing schedules. Mowing frequency may vary depending on weather conditions. Ensure special precautionary measures are taken while mowing in the vicinity of floral collections and other dedicated areas. Reference Appendix C, Maps and Area Layout, designated facility mowing locations.

C.2.2.10.1.2 Ensure that precautions are taken as to not cross-contaminate turf areas and fields / pastures. Some areas may require special equipment decontamination as not to transfer contaminants / pathogens from one area and contaminate another. Since research is ever-changing, the SP shall communicate with the research and other Governmental staff for specific precautionary measures.

Performance Objective	Threshold
Communicate with research staff for specific precautionary measures to prevent cross contamination of fields and pastures.	90% Compliance

C.2.2.10.1.3 Ensure personnel and landscape equipment are in accordance with OSHA and facility safety policy concerning PPE and approved safety equipment guards.

Performance Objective	Threshold
Ensure personnel operate landscaping equipment in accordance with OSHA and facility safety policies concerning PPE and approved equipment guard standards.	100% Compliance

C.2.2.10.1.4 Perform other turf maintenance tasks as required, such as, fertilizing turf and plant bedding, aeration, liming, and overseeding.

C.2.2.10.1.5 Maintain the environment surrounding utilities, well heads, equipment and facilities that are visible as well as around those facilities in areas obscure to normal sight.

C.2.2.10.2 Leaf / Litter Control

C.2.2.10.2.1 Remove leaves, litter, trash, and debris (limbs, rocks, etc) from groomed facility property, including rights of way. Remove litter and trash from facility properties not necessarily maintained (wooded areas, natural meadows, etc). Remove leaves and debris from building window wells, underground rain leaders, downspouts, and drains. Chip limbs to a size that are manageable and adequate for the compost facility. Manage material in accordance with facility policies and sustainable practices.

Performance Objective	Threshold
Remove litter, trash, leaves, and other debris from facility property, and manage material in accordance with facility policy and practices.	80% Compliance

C.2.2.10.2.2 Properly dispose of illegally dumped trash, debris, and waste that may occur on property, including rights of way. Notify COR or designated representative if hazardous waste is suspected or illegal dumping has occurred.

Performance Objective	Threshold
Notify COR or designated representative if hazardous waste is suspected or illegal dumping has occurred.	100% Compliance

C.2.2.10.3 Trimming, Pruning, Weeding, and Edging

C.2.2.10.3.1 Monitor grass growth and schedule trimming and edging operations in order to sustain an acceptable appearance. However, authorized facility officials may request more frequent or special trimming and edging parameters. Trimming and edging frequency may vary depending on weather conditions. Trim turf along the edges of curbs, sidewalks, driveways, walls, poles, fences, utilities, or any other objects located within the designated areas. Ensure special precautionary measures are taken while trimming in the vicinity of floral collections and other dedicated areas. Remove clippings / debris from the areas the same day and manage in accordance with facility protocol and sustainable practices.

Performance Objective	Threshold
Ensure special precautionary measures are taken while trimming in the vicinity of floral collections and other dedicated areas.	95% Compliance

C.2.2.10.3.2 Prune and trim approved trees, hedges, and shrubs in accordance with A-300 (Part 1) 2001, American National Standards for Tree Care Operations, Tree, Shrub, and other Woody Plant Maintenance - Standard Practices (Pruning) to present a clean and orderly appearance and to prevent limbs from touching or encroaching on buildings, sidewalks, or utilities.

C.2.2.10.3.3 Remove weeds and vegetation other than designated and planted items from beddings and remove vegetation from joints and separations in roadways, parking lots, curbs, sidewalks, and paths.

C.2.2.10.4 Herbicide / Pesticide Treatments and Pest Management

C.2.2.10.4.1 Control and eradicate parasitic vegetation, weeds, insects, and unwanted pest animals throughout the facility (excluding fields, plots, crops, and greenhouses) using pertinent knowledge in Integrated Pest Management (IPM), botany, chemistry, toxicology, and Best Management Practices (BMP). Provide IPM services in animal facilities to maintain regulatory compliance, in laboratories to ensure only minimal impact on research, and in offices and other shop and facility areas. Provide services according to approved Government established schedules (weekly, bi-weekly, monthly, or quarterly). Frequency is based on technical decisions using such factors as facility use, condition, occupant need, accessibility, cost, and long term use of the facility. Respond to emergency pest situation 24/7 to specific locations identified by the COR.

Performance Objective	Threshold
IPM Program effectively controls unwanted vegetation and pests with minimal impact on research and facility areas.	98% Compliance
Respond to emergency pest situation within 30 minutes of the notification to analyze, evaluate, troubleshoot, protect contents, and eliminate the pest.	100% Compliance

C.2.2.10.4.2 Scout to determine when and what grasses and horticultural landscape plants need herbicide and pesticide attention and treatment. Select the proper pesticide and determine chemical quantities. Apply herbicide and pesticide to landscape and plants as determined. Take precautions to minimize risks of damage to non-target plants or animals. Keep pesticides from entering ground water through run-off or soil leaching.

C.2.2.10.4.3 Ensure chemicals are used, stored, and posted in accordance with all EPA Worker Protection Standards, other Federal, state, local regulations, agency policies and procedures, and the facility pesticide policies. Maintain the pesticide storage and mixing areas, facilities, and all associated apparatus and materials necessary for application in a safe, clean, and suitable condition. Maintain an adequate and accurate inventory of chemicals (including current label, EPA registration number, and MSDS), apparatus, and materials, forecast future needs, and procure to ensure availability. Utilize the lowest toxicity level possible and apply in doses that are not toxic to facility personnel or research animals. Maintain updated and accurate log book containing, at minimum, a copy of the pest management plan, chemical inventory and information, pest surveillance data sheets, locations of all traps and bait throughout the premises, and pesticide applications. Maintain and retain completed spraying records to show dates applied, chemical type, quantities, locations and projects, and so forth in accordance with applicable regulations. Provide an annual pesticide inventory to the facility safety staff.

Performance Objective	Threshold
Maintain and retain completed spraying records to show all information required by Federal, state, local regulations, agency policies and procedures, and the facility pesticide policies.	100% Compliance.
Post applied areas with all information required by Federal, state, local regulations, agency policies and procedures, and the facility pesticide policies.	100% Compliance.

C.2.2.10.4.4 Maintain a valid Maryland Department of Agriculture Herbicide Applicator and Maryland and D.C. Pesticide Applicator Licenses in Category III-A, III-B, and III-C, Ornamental and Turf and VII-E, Industrial Weed. Ensure herbicides / pesticides are applied only by licensed individuals and abide by the Beltsville Area Agricultural Worker Safety and Pesticide Usage policy and USNA Campus Pesticide policy.

C.2.2.10.5 Horticulture

C.2.2.10.5.1 Provide horticultural expertise for designing, implementation, planning, installing, and maintaining the landscape throughout the facility in accordance with a variety of programs and committees set forth by the facility, such as BARC Landscape Committee, Compost Program, Mitigated Stream Line Planting, Anacostia Watershed Restoration Agreement, the Chesapeake Bay Watershed Agreement, Riparian Buffers, Conservation Meadows Program, an on-site nursery program, wetland cleanup programs, Friends of the Agricultural Research Center Beltsville (FAR-B), Floral and Nursery Plants Research Unit.

C.2.2.10.5.2 Design landscaping plans using USNA introductions and unimproved native plants primarily; secondly design using other newly introduced plant materials. Design and construct areas making use of wildflower and natural vegetation. Meadows and natural environments shall be approved by COR. Arrangements shall be attractive presentations that meet generally accepted standards for landscape design in accordance with ANSI standards.

Performance Objective	Threshold
Promote program to ensure that USNA introductions and native plants are maintained and re-introduced in new designs and landscaping projects.	90% Compliance

C.2.2.10.5.3 Analyze projects for operational requirements, land-use commensurate with USDA needs and emphasis, efficient correlation of ground and water forms, plant forms, structures, and roads and walks to serve aesthetic, functional and other interrelated purposes.

C.2.2.10.6 Ponds, Pools, and Fountains:

C.2.2.10.6.1 Maintain and repair the facilities' ponds (watersheds, sediment and erosion control ponds, wetlands, and wastewater effluent ponds), pools (koi, reflective and ornamental), and fountains. Maintain water quality, carbon filtration systems, aeration systems, algae and vegetation, plumbing, and valves. Remove all trash and debris from water and water's edge. Transport / transplant plants and fish as required. Perform winterization, start-up, and adjustment procedures. Perform turn on / shut off ornamental fountains as required.

C.2.2.10.6.2 (USNA specific) Maintain the carbon filtration systems used to remove chloramines from water used in the koi ponds.

C.2.2.10.7 Lawn / Greenhouse Watering and Irrigation Systems:

C.2.2.10.7.1 Design, layout, install, operate, repair, and maintain the facilities' automated and non-automated irrigation systems (above and below ground). Perform seasonal maintenance to include start-up / shut-down, excess water removal, and component replacement. Update and keep records required for MD and D.C. water use permits.

Performance Objective	Threshold
Maintain irrigation systems and water systems so they are functional when required. Maintain all records accordingly.	98% Compliance

C.2.2.10.8 Basic Ground Maintenance and Construction:

C.2.2.10.8.1 Provide basic ground maintenance, to include aeration, top dressing, field preparation, and watering plants and grasses.

C.2.2.10.8.2 Construct and maintain the facilities' ground bedding, flowers, hedges, shrubs, and orchards. Perform landscape construction and maintenance that may include but is not limited to concrete, flagstone, timber, gravel, mulch, trails / walks, patios, retaining walls, and memorial stones and plaques. Repair ground (reseeding, resodding, and replanting) in areas that have died or have been destroyed as a result of pedestrian and vehicle traffic, natural occurrences, heavy equipment, and snow / salt.

C.2.2.10.8.3 Remove and properly dispose of trees, stumps, large or excess vegetation. Work and groom concerned areas to blend with the adjacent surroundings. Remove stumps to a minimum of 12-inches below the ground plane and work the site to present a smooth landscape blending with the adjacent surroundings. Ensure that trees, limbs, and other debris are removed from roadways on a 24-hour basis to prevent hazardous conditions.

Performance Objective	Threshold
Remove limbs and other debris from public accessible roadways 24/7 within 2-hours from notification.	95% Compliance

C.2.2.10.8.4 Maintain ditch, drainage areas, field drains, drain tiles, window wells, and stairwells to allow proper water drainage. Repairs shall be made to prevent sags, clogs, and washouts. Provide heavy equipment services in support of facility maintenance and research operations through tasks such as but are not limited to soil stripping, minor excavation, hauling, trenching, backfilling, spreading bituminous concrete, and other similar jobs.

C.2.2.10.8.5 Construct (as needed), maintain, and repair facility roadways (concrete, gravel, asphalt), blacktop berms, parking areas, sidewalks, curbs and gutters, bridges, handicap accessible ramps, wheel stops, speed bumps, dock aprons, shoulders, trails, etc. using proper construction techniques and in accordance with the Maryland State Department of Highway Standards Specifications for Construction, D.C. Department of Public Works, and Material and Americans with Disabilities Act (ADA) / Uniform Federal Accessibility Standards (UFAS) guidelines and requirements. Road repairs range from a minor fill task to removing / replacing and re-striping portions of asphalt in areas where drain tile, waterlines, and other utilities may cross beneath.

C.2.2.10.8.6 Comply with MDE and D.C. Sediment and Erosion Control requirements and regulations while performing any “earthwork” tasks to include but not limited to environmental soil silt fences (requires a Sediment and Erosion Control Certification), area mediation, and reforestation.

C.2.2.10.8.7 Provide ground maintenance support for the facility’s protection of natural resource program under the Environmental Management System through stream restoration, stream bank stabilization, and other conservation minded projects.

C.2.2.10.8.8 Provide clean-up service and assistance for environmental clean-up, area clean-up, and disaster clean-up.

C.2.2.10.9 Compost / Mulch Facilities

C.2.2.10.9.1 (Specific to BARC) Deliver raw organic material (chipped wood particles, leaves, green waste) to the BARC Compost Facility and collect the by-product mulch to use as landscaping purposes around the facility. Determine amounts needed and relay to compost facility operators to ensure quantities are produced for facility plant bedding in addition to research usage.

Performance Objective	Threshold
Provide raw organic material to composting facility to ensure quantities are produced for facility plant bedding in addition to research usage.	90% Compliance

C.2.2.10.9.2 (Specific to USNA) Operate the USNA Brickyard / Compost Facility to produce organic compost to be utilized throughout the grounds. Grind facility chipped wood particles, leaves, green waste, and cow manure. Haul processed cow manure from BARC to USNA. Incorporate the composting operation in all grounds maintenance goals, including the reduction of unsightly green waste and production of top dressing, soil amendments, and wood and leaf mulch. Compost shall be used for soil amendments and top dressing, wood mulch shall be used for mulching beds and trails, and leaf mold shall be used by the Herb Garden for roses and in the Native Plant Collection for ground cover.

Performance Objective	Threshold
Operate the USNA Brickyard / Compost Facility in accordance with the described objectives.	90% Compliance

C.2.2.11 HEATING VENTILATION AIR CONDITIONING (HVAC)

C.2.2.11.1 Install, maintain, modify, calculate, repair, and adjust the climatic / environmental controls and equipment of the facilities to include but not limited to office space, plant growth chambers / rooms, animal rooms, insect rooms, fruit and vegetable storage rooms, critical literature and sample / specimen areas and laboratory facilities (dust control, negative and positive pressure areas, constant temperature and humidity areas). Maintain office environments between 65 and 80 degrees F. Maintain areas using proper control and procedures set forth by the facility research and administrative staffs. Perform requirements on large, complex commercial

and industrial HVAC systems and equipment; special purpose, unique, or modified and upgraded systems used for research facilities, plant growth chambers, animal rooms, and other environmentally controlled areas; equipment featuring critical airflow volumes, light intensity, humidity, and temperature control; heaters; vacuums; pneumatic and electronic variable air volume systems; and pressure dependent and pressure independent terminals.

Performance Objective	Threshold
Maintain systems to prevent hazardous conditions from developing in controlled environments.	100% Compliance

C.2.2.11.2 Maintain portable heating sources. Ensure heaters are burning cleanly and not emitting large amounts of ethylene that may have effects on personnel, animals, and plants. Deploy portable heating systems to critical temperature controlled areas in the event of power outage or equipment maintenance or failure.

C.2.2.11.3 Ensure that personnel are in full compliance with EPA requirements for Universal Technician for Chlorofluorocarbon (CFC) refrigeration certification.

C.2.2.12 MANURE REMOVAL SYSTEMS

C.2.2.12.1 Maintain and repair the facility automated manure removal systems (alley scrapers, auger style, etc).

Performance Objective	Threshold
Provide proper repair and maintenance of manure handling equipment. Have access to specialized repair parts. Ensure equipment is operational at all times.	100% Compliance

C.2.2.13 METAL FABRICATION

C.2.2.13.1 Design, fabricate, construct, alter, assemble, install, repair, and maintain system, laboratory, and building equipment and fixtures in accordance with accepted methods and techniques of the Sheet Metal and Air Conditioning Contractors National Association (SMACNA) and welding trade in support of facility maintenance and research requirements. Trade practices shall include facility "Open Flame" policy, NFPA, Federal, state, and local regulations. Ensure welders possess ASME Welding Certification as it applies to procedures.

C.2.2.13.2 Fabrication may include boiler making, heating, air conditioning, and ventilation ductwork; vents and special hoods for laboratory equipment; equipment guards, metal table and countertops; drawers, shelves, doors, and storage areas. Fixtures may include such items as supports and frames; livestock systems (corrals, gates, restraining chutes); research laboratory equipment and specialty items; pipe lines (gas, steam, and water) and pipe supports; high pressure tanks and equipment; and facility equipment (heavy and farm vehicles, equipment, and attachments).

Performance Objective	Threshold
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Performance Objective	Threshold
Design and provide specialty items requested by the research community within requested time frame.	95% Compliance

C.2.2.13.3 Fabricate equipment and vehicle parts and components that are obsolete or are “special” or custom research and laboratory based entities.

C.2.2.14 PLUMBING / PIPEFITTING

C.2.2.14.1 Install, repair, alter, maintain, and modify the facility plumbing systems (above and below ground) and components in accordance with the Universal Plumbing Code (UPC) and other Federal, state, and local requirements, and general plumbing / pipefitting techniques and trade practices. Ensure each person has the required water and wastewater distribution system and collection system licenses. Ensure each person is proficient in backflow preventive maintenance and testing and certified in maintenance and testing of anti-siphon devices (Backflow Tester Certification).

C.2.2.14.2 Maintain and repair high, medium, and low pressure steam mains and distribution systems. The pressures for these systems are from 0 - 125 lbs and furnish heat and process steam to various facility laboratories, offices, animals, and special purpose areas and equipment.

C.2.2.14.3 Repair, replace, and maintain pressure reducing valves, steam traps, packing valves, valve seats, diaphragms, back-flow preventers, flanges, gaskets, seals, radiators, cage washers, distillation units, incubators, rainfall simulators, ultrasonic water flow meters, compressed gas regulation systems, safety showers and emergency eyewash stations, heating coils, condensate returns, pumps, boilers and feed water, raw water lines from deep wells to water treatment plants, and treated water mains from treatment plant to the facility.

Performance Objective	Threshold
Maintain steam distribution systems to prevent energy losses and system integrity.	95% Compliance

C.2.2.14.4 Install, maintain, and repair facility pumping systems, greenhouse evaporative cooling systems, humidifiers, reverse osmosis and deionization systems, autoclaves, sterilizers, distillation units, converters, and other equipment needed to support research programs as needed. Frost-proof pipes, and controls to prevent freezing and cracking during winter months.

C.2.2.14.5 At the completion of the facility improvements structured by the ESPC, the SP shall be responsible for related maintenance. Maintain facility steam traps. Locate and repair failed traps. Survey, test, and blow out 25% of the approximately 3,012 steam trap population annually. Test steam traps located in steam pits. Maintain data of the failed traps and any conducted maintenance. Maintain steam and condensate pipe lines and insulation. Replace insulation as necessary in accordance with set guidelines as specified by the ESPC contractor. Perform asbestos abatement in accordance with regulatory guidelines. Maintain well water pumping system equipment and piping network for the water supply from BARC East (operations South of Route 1) to BARC West (operations North of Route 1). Maintain and treat the alkaline

hydrolysis tissue digester waste discharge line from the digester to the WWTP. Maintain sewer lines and pumping stations constructed from FDA and DOS to the BARC Waste Water Treatment Plant. Provide additional water treatment, monitoring, and pump station and utilities maintenance that accommodates the ESPC contract.

C.2.2.15 PREVENTIVE MAINTENANCE

C.2.2.15.1 Perform preventive maintenance on Government-furnished equipment, facilities, facility utilities, research support equipment, and tools. Preventive maintenance is defined as reoccurring services scheduled and performed throughout the term of the contract. Preventive maintenance requires planning, scheduling, and frequent quality control monitoring by the SP. The maintenance shall be in an effort to prevent possible breakdowns, to extend equipment life, and to identify and prevent possible safety and environmental problems, and to ensure no interruption of services to research or harm to animals and plants.

C.2.2.15.2 Implement and maintain an automated Preventive Maintenance and Inspection (PMI) Program to correct and prevent malfunctions and maximize the overall operating efficiency. Develop and maintain a comprehensive preventive maintenance and service program ensuring the reliability of Government-furnished items, facilities, facility utilities, research support equipment, and tools. Conduct preventive maintenance / inspections and correct deficiencies ensuring proper system operations. Correct and prevent malfunctions and maximize the overall operating efficiency. Complete and maintain preventive maintenance records for the system and equipment items included in the contract resulting from this solicitation. Equipment records shall contain a complete history of maintenance, including dates scheduled and completed and name of technician performing the work. Develop a comprehensive plan and submit the plan to the Government for approval within 30 calendar days after award. The plan shall address the technical and operating aspects of the facility and project services and tasks in weekly increments for a complete year. The plan shall address the key components of the system and shall incorporate the manufacturer's recommendations, service guides, applicable standards, and service requirements. Document shall record at a minimum part nomenclature, date of replacement, and manufacturer. Serial numbers of major components such as pumps, motors, etc. shall be recorded in cases where the serial number would not be accessible after installation.

Performance Objective	Threshold
Implement and maintain an automated PMI Program.	95% Compliance
Correct and prevent malfunctions and maximize the overall operating efficiency.	95% Compliance

C.2.2.15.3 Provide equipment repair and corrective maintenance service to return furnished equipment, facility utilities, research support equipment, and tools to their proper operating condition. Corrective maintenance requirements shall reflect deficiencies identified during inspections or during other service work. Corrective maintenance shall be accomplished concurrent with other service tasks or as soon as possible to sustain full operation of plant functions. Notify the COR prior to replacing or disposing of any part that exceeds \$500 replacement cost. The COR may inspect the part to determine suitability for repair or to provide guidance on final disposition.

C.2.2.16 REFRIGERATION SYSTEMS

C.2.2.16.1 Install, maintain, modify, troubleshoot, clean, repair, or adjust commercial and industrial refrigeration systems and equipment to prevent loss or damage to research items. Equipment may include but is not be limited to refrigerators, walk-in coolers, ice machines, constant temperature rooms and equipment, refrigerated water fountains, deep freeze cabinets, ultra-low deep freezers (which maintain temperatures of -112 degrees F/-80 degrees C), refrigerated centrifuges, cooling towers, chillers (centrifugal, screw, rotary, and reciprocating (excluding chillers and related equipment located at NAL)), reverse cycle pumps, cryostats, water baths, air dryers, cooling systems for electron microscopes and other research equipment, various sizes and makes of refrigeration compressors, pneumatic and pneumatic-electric controls, ECG growth chambers, dew chambers, pumps, motors, and other equipment components.

Performance Objective	Threshold
Maintain refrigeration systems to prevent loss or damage to research. <i>(ANY loss of samples, plants, or other research material due to improper maintenance or repair is unacceptable)</i>	100% Compliance

C.2.2.16.2 Recover refrigerant on surplus air conditioning, automotive, refrigeration boxes, and window units prior to disposal per EPA guidelines. Replenish various Freon and refrigerant mixtures as required in accordance with the EPA requirements for universal technician certifications and regulations.

C.2.2.16.3 Provide annual certification / calibration of existing refrigerant monitoring stations as required by EPA requirements regulating cooling equipment utilizing Hydro-Chlorofluorocarbon (HCFC) refrigerants.

C.2.2.17 SIGNAGE

C.2.2.17.1 Construct, assemble, install, and maintain facility signage to include but not limited to building and office information, identification, and numbering; tree and plant identification; directional signs; banners; road signs; information; and reflectors on roads, bridges, storm drains, and entrances. The product shall be aesthetically pleasing and professional in appearance and be in conformance with ARS and facility signage policy (and the state and district highway departments when required). The signage will vary in materials such, but is not limited to plastic, aluminum (flat and embossed), wood (flat and carved / engraved), fabric, or a combination and may be permanent or temporary. Conduct annual survey to identify signage to be replaced annually by September 30. Remove and properly dispose of signage that is no longer applicable or has been placed without the facility authorization and approval. Signage materials shall be recycled when possible. Sign posting materials may consist of aluminum and wooden stakes, fence posts, etc., and shall be recyclable when possible.

Performance Objective	Threshold
Restore, replace, or repair all signs in conformance with agency signage policy and other controlling authorities as required.	100% Compliance

C.2.2.18 SMOKE / FIRE SERVICE MAINTENANCE AND DETECTION

C.2.2.18.1 Maintain the fire alarm smoke detection and sprinkler systems. Maintain, inspect, test, and certify in accordance with pertinent codes and guidelines. Inspection and servicing shall be conducted by qualified personnel certified by the National Institute for Certification in Engineering Technologies Fire Alarm, International Municipal Signaling Association Fire Alarm, state or local authority, or by personnel / organization listed by a national testing laboratory for the servicing of fire alarm systems. Perform visual examinations of fire panels, annunciators, smoke and duct detectors, pull stations, bells, strobes / horns, and magnetic door holders. Replace zone labels if missing or out-of-date, as required, on panels and annunciators. Clean and wipe any accumulated dust, insects, or varmints inside panels and annunciators. Thoroughly clean any accumulated corrosion. Replace battery corrosion disconnect terminal wiring as necessary. Inspect and test batteries with and without load for proper output. Thoroughly clean all smoke detectors and duct detector chambers, screens, and terminal bases annually with NFPA-approved compressed air smoke detector cleaner. Inspect and test all fire alarm supervisor circuits, control panels, and annunciators for normal operation including ground fault detection circuit and magnetic door release. Replace all burned out bulbs as required. Inspect and test all manual pull stations. Replace all missing glass or plastic rods for pull down switches. Inspect and test all alarm bells and strobe / horns. Inspect and test all smoke, duct, and heat detectors. Adjust smoke detectors sensitivity as required for proper functionality. Provide inspection, testing and maintenance for chemical extinguishing systems FM-200 located in room 018 building 007 and room 6B in the basement of building 1180 by trained personnel. Testing of all system components in these rooms shall not cause discharging of FM-200 agent. SP shall assume full liability for any accidental discharge of FM-200 caused during system testing.

C.2.2.18.2 Perform inspection, testing, and maintenance for the facilities' automatic fire alarm sprinkler systems (wet and dry) and fire and jockey pumps. Assume the responsibility for any water damage to Government laboratory equipment, research, and property. Conduct tasks semi-annually and annually as required by Federal, local, and state regulations and guidelines and NFPA. Ensure that the system is operating properly at all times.

Performance Objective	Threshold
Conduct annual inspections and testing of the facilities' fire sprinkler, detection, and pressurization systems to ensure proper operation of systems and components.	100% Compliance

C.2.2.18.3 Perform inspection, testing, and maintenance of the facilities' chemical fire extinguishers. Ensure that extinguishers are present and possess adequate charge. Comply with all pertinent codes and guidelines. Replace extinguishers as necessary to comply with pertinent codes.

C.2.2.18.4 Submit 2 weeks after award a written monthly schedule indicating which alarm systems, chemical fire extinguishers, and fire and jockey pumps will be inspected, tested, and

maintained through each month. Indicate dates on which each system will be inspected, tested, and maintained.

C.2.2.18.5 Submit a report to the COR as occurrence of any found deficiency, safety hazard, or code violation in the existing fire protection system, equipment, and devices. Report to the COR of any sprinkler heads subject to manufacturer recall.

C.2.2.18.6 Accurately document each inspection, testing, and maintenance performed on any fire alarm detection, sprinkler system, chemical suppression system, and fire pump. Sign and deliver documentation to the COR within 3 days of task completion.

C.2.2.18.7 Respond to all buildings with activated sprinkler systems. Meet and assist fire department. To prevent water damage due to equipment malfunction, the SP may turn off the activated fire sprinkler system only after making certain that no fire is present and after securing instructions from the senior fire officer.

C.2.2.19 UNFIRED PRESSURE VESSELS

C.2.2.19.1 Install, maintain, repair, inspect, and certify facility's unfired pressure vessels (including autoclaves, steam sterilizers, soil sterilizers, Steam Jennys, dishwashers, and kilns) utilizing an unfired pressure vessel experienced master plumber. Perform tasks in accordance with Safety Health and Environmental requirements, OSHA, NEC, ASME, and all Federal, state, and local codes. Inspect pressure vessels annually. Inspect / certify each unit and make minor adjustments as necessary. Operate each piece of equipment through a minimum of 2 complete cycles to verify proper temperatures, pressures, readings, drain operations, and all electrical aspects of the cycle procedure. Properly document all inspections and maintenance conducted for each piece of equipment. Note deficiencies and reasons for any equipment not passing certification. Tag each piece of equipment that successfully completed inspections with the date and technicians signature. Submit the inspection report to the COR to include any deficiency, safety hazard, or code violation.

Performance Objective	Threshold
Inspect all unfired pressure vessels annually and log and record maintenance service logs with 100% accuracy.	100% Compliance

C.2.2.20 WARNING / TRAFFIC SIGNAL MAINTENANCE

C.2.2.20.1 Maintain the 8 warning / traffic signals at the controlled intersection of Powder Mill Road and Soil Conservation Road. Maintain the signal head, control box, and other associated equipment in proper working operation in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD), Maryland State Highway Administration (MSHA), Institute of Traffic Engineers (ITE), National Electrical Manufacturer's Association (NEMA), International Municipal Signal Association (IMSA), NEC, Underwriter's Laboratory (UL), and PEPCO. Check, test, and repair equipment, and periodically replace parts as scheduled or directed by the COR to include, painting, control equipment replacement, cabinet rewiring, installing detector loop, installing new signal head, and installing signs on traffic signal

structures.. Provide services utilizing personnel that possess IMSA certification as Level II and III Traffic Signal Technician depending on the complexity of the problems and modifications.

Performance Objective	Threshold
Maintain the Powder Mill / Soil Conservation Road intersection traffic signal for proper operation in accordance with pertinent regulations and guidelines.	100% Compliance

C.2.2.21 WATER AND WASTEWATER TREATMENT SYSTEMS

C.2.2.21.1 Operate, maintain, and repair the water treatment plants (WTP), wastewater treatment plants (WWTP), and filtration lift stations in accordance with requirements of the National Pollutant Discharge Elimination System (NPDES) permit. Provide water analysis laboratory services in accordance with requirements of the NPDES permit, Sludge Utilization permit, Four Water Appropriations permit, Non-Tidal Wetland and Waterway permit, State Discharge permit, and the Oil Operations permits. Listed permits shall be titled under the specific facility and not by the SP. The SP shall be responsible for the requirements to maintain, update, and renew the permits. Comply with requirements of Federal, state, and local regulatory agencies with regard to wastewater: Federal Applicable Regulations (Clean Air Act, Clean Water Act, Safe Drinking Water Act, National Primary and Secondary Ambient Air Quality Standard, and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)), Maryland State Regulations (Title V, Stormwater Management Program, Confined Space Program, Lockout / Tagout Program, and Wellhead Protection Program), and D.C. Water and Sewer Authority. Repair work shall also comply with any universal directives such as UPC, NEC, and National Fire Protection Code (NFPC). Systems shall be maintained to prevent unsatisfactory service conditions including flooding, pump station failures, and nuisance odors. Ensure personnel who are tasked with operation of WTP and WWTP possess a current facility appropriate Stationary Operators License.

Performance Objective	Threshold
Operate and maintain WWTP and WTP in accordance with Federal regulations and safety policies.	100% Compliance
Operate WWTP, WTP, and lift stations in accordance with requirements of the NPDES permit.	100% Compliance of NPDES permit.

C.2.2.21.2 Submit a water and wastewater monthly Discharge Monitoring Report (DMR) to the COR. Notify COR immediately upon discovery of any noncompliance with any of the NPDES permitted parameters, of any lift station bypassing, and of any discharges of any other type in violation of the NPDES permit. Immediately initiate an Incidence Report to include a description of the discharge, the cause of noncompliance, and the period of noncompliance including exact dates and times (or, if not corrected, the anticipated time the noncompliance is expected to continue) and steps being taken to reduce, eliminate, and prevent the recurrence of the non-complying discharge. The report of noncompliance shall be specific and prepared in accurate detail upon the occurrence. In the event that any regulatory agency assesses a monetary fine

against the Government for violations caused by the SP, the SP shall reimburse the Government for the amount of that fine.

Performance Objective	Threshold
Notify COR within 5 minutes upon discovery of any noncompliance with any of the NPDES permitted parameters.	100% Compliance

C.2.2.21.3 Visit and document each visit at WTP, WWTP, and lift stations at a minimum of once per 8 hours unless otherwise specified. Documentation in the facility logbook shall include but is not limited to any problems with the systems as well as any adjustments or repairs made. Perform preventive maintenance.

C.2.2.21.4 Water Treatment Plant (WTP)

C.2.2.21.4.1 Operate and maintain the WTP 24/7 to provide continuous availability of potable water. Designate duty operators separate from those in the WWTP during normal duty hours as defined in C.1.5. Maintain proper water levels and chemical levels including chlorine and soda ash. Operate telemetry system. Operate deep wells. Ensure storage tanks remain as full as possible to ensure adequate water supply for the facility and for emergency fire situations. Correlate data with capacity or pumping rates to help anticipate well problems in advance and provide data for proper maintenance measures. Compute specific capacity of each well monthly. Develop balanced pumping schedules to avoid over-production from one well.

Performance Objective	Threshold
Operate and maintain the WTP 24/7 to provide continuous availability of potable water.	100% Compliance

C.2.2.21.4.2 Maintain records for installed equipment maintenance, observed problems, and aquifer water levels. In addition to general industry practices and requirements stated elsewhere, records shall be maintained on the daily consumption of chlorine, chlorine cylinder change, daily chlorine residuals (free and total), pH and iron test results, monthly well capacity, well repairs, and other tests required by MDE or local authorities associated with the particular worksite.

C.2.2.21.4.3 Monitor usage of WTP chemicals and procure chemicals as necessary. Ensure adequate quantities are always available. Transport and store chemicals and related materials in accordance with applicable standards.

C.2.2.21.4.4 Provide technical expertise for the controls of the Filtration WTP. Respond to emergencies within 4-hours. Maintain a preventative maintenance program for the control system to include, at a minimum, an annual inspection of the entire control system to ensure controls, modules, sensors, and modems are calibrated and working properly. Repairs or inspections shall be coordinated through the COR to ensure the system is being maintained properly.

C.2.2.21.5 Waste Water Treatment Plant (WWTP)

C.2.2.21.5.1 Operate and maintain WWTPs 24/7 and ensure that no non-permitted discharges occur. Designate duty operators separate from those in the WTP during normal duty hours as defined in C.1.5. Operations and maintenance shall include general operation of plant equipment, valves and piping, sampling and lab analyses, waste and effluent disposal, dump and clean primary, secondary, and chlorine contact chambers in May and again in November, and other related services following normal industry practices.

Performance Objective	Threshold
Operate and maintain the WWTP 24/7 and provide continuous waste water treatment services and ensure that no non-permitted discharges occur.	100% Compliance

C.2.2.21.5.2 Maintain records for equipment maintenance, observed problems, and any other appropriate operating procedures. Wastes including sludge, grit, screenings, and other waste solids shall be routinely collected, analyzed and transported to the disposal site, with location subject to COR approval. Wastes deemed hazardous shall be transported and disposed of in accordance with Department of Transportation (DOT) and EPA requirements. Records, receipts, manifests, and log entries for such disposals shall be kept on file and shall be available for Government review. Records, receipts, manifests, and logs shall be the property of the Government. Disposal Collect sludge and other waste solids generated from WWTP operations. Assist farm operations personnel in the handling and loading of the WWTP sludge for disposal or sub-surface injections.

C.2.2.21.6 Lift Stations

C.2.2.21.6.1 Operate and maintain lift stations. Major lift stations shall be checked at least twice every eight hours. Operation and maintenance shall include but is not limited to pumps, motors, float systems, wet wells, comminutors or barminutors, control panels, bubbler systems, related equipment, and general housekeeping. Grit removal pumping twice yearly is required.

C.2.2.21.6.2 At the completion of the facility improvements structured by the ESPC, the SP shall be responsible for maintaining the sewer lift pump station associated with the sewer lines constructed from FDA and DOS to the BARC WWTP.

C.2.2.21.7 Reverse Osmosis and Deionization Systems

C.2.2.21.7.1 Operate and maintain the facilities reverse osmosis (RO) and deionization systems (approximately 20 systems). Maintain water quality at 10 Megohm-Cm on all systems. Monitor the systems for proper membrane performance range (replace RO membranes when reject range drops below 85%), proper post-filter and final pressure, and overall system performance. Maintain and service systems through but not limited to pre-filter changes; periodic flushing; replacing mixed beds, carbon beds, ultraviolet lights, storage vent filters; and general equipment cleaning. Sanitize RO and deionization storage tanks and distribution systems. Maintain proper salt levels in water softener brine tanks. Perform bacteria counts and total organic counts (TOC). TOC sampling will be performed either on-line or via a grab sample. Grab samples shall use low

TOC certified vials or containers certified for less than 10 ppb TOCs. On-line grab samples will be taken after a flush cycle to assure that a representative sample is taken. Samples will be analyzed using a broad range analyzer that is routinely used to measure deionized water. The analyzer shall be capable of providing measurement within 1% of the IC value and shall be capable of providing accurate results in the 10-100ppb TOC range. Monitor permeate and reject water quality. Test feed water and product water for total dissolved solids, calcium hardness, pH, iron, and colloidal material and record.

C.2.2.21.7.2 Repair or replace all equipment on the pure water systems. Maintain and adjust all plumbing and electrical systems associated with the facilities reverse osmosis (RO) and deionization systems. All systems shall have the minimum service: replace all water filters and pre-filters every 6 months, replace all tank filters once a year, replace mixed bed deionizers every 6 months, and sanitize the storage tanks and distribution systems each year. Higher standards for building 010A and 200 require these systems to be sanitized at least every three months. Replace building 200's mixed bed deionizer and pre-filters every 3 months.

C.2.2.21.7.3 Maintain an accurate maintenance log of all maintenance and all water tests performed on each RO system. Provide updated log immediately to COR upon request.

C.2.2.21.8 Fire Hydrants

C.2.2.20.8.1 Maintain facility fire hydrants. Frost-proof hydrants to prevent freezing and cracking during winter months. Flush fire hydrants to ensure chlorine residual levels and water quality are adequate in areas of the distribution system. Document flushing and take periodic chlorine tests to ensure flushing time is adequate to ensure proper residual. Results of residual chlorine tests shall be provided to the COR upon request.

Performance Objective	Threshold
Flush fire hydrants to ensure chlorine residual is in accordance with variable parameters set forth by the MDE quality standards.	97% Compliance

C.2.2.21.8.2 Flow test existing fire hydrants between 1 April and 31 May to comply with annual withdrawal reports provided to MDE and test water quality. Between 1 September and 31 October each year, flow test zones to compute the gallons per minute (GPM) available in each zone for fire fighting purposes. Hydrant flow testing shall be accomplished in accordance with NFPA STD 24, Sec. 7.3.8, and American Water Works Association (AWWA) Manual 17; Installation, Field Testing, and Maintenance of Fire Hydrants. Results shall be suitably documented and filed. Three sets of flow test results shall be provided to the COR. Results shall be provided in electronic format (computer disc or e-mail) upon request.

Performance Objective	Threshold
Flow test existing fire hydrants within required schedule.	95% Compliance

C.2.2.22 WATER QUALITY LABORATORY SERVICES

C.2.2.22.1 Provide sampling and laboratory analytical services for process control, treatment, and to support regulatory operating requirements and to provide proper water chemistry for facility operations. Testing shall include but are not limited to pH, alkalinity, condensate return quality, cooling towers, and boiler water content. Such sampling and testing procedures shall be accomplished in accordance with applicable operating permit requirements, conditions, and industry standards. Water standards shall be in accordance with variable parameters set forth by the MDE / AWWA local water quality standards. Document laboratory results and conclusions. A complete set of laboratory records shall be maintained for each laboratory test to include: date and time of sampling, type of sample, name of sample and technician, location of sample, test performed, and test results. In addition, results of such laboratory analyses shall be assembled into the appropriate reports, signed, and delivered to the COR. Copies of testing records and associated correspondence shall be logged and maintained on file and available for COR review. The Government reserves the right to collect water samples and have tests performed to verify the SP's performance of work. Maintain laboratory equipment in good working order including care of glassware and associated apparatus. Monitor equipment and calibration needed. Calibrated equipment shall be available at all times.

Performance Objective	Threshold
Provide sampling and laboratory analytical services for process control and to support regulatory operating requirements set forth by MDE / AWWA.	100% Compliance
Water is maintained within established MDE parameters and pH is maintained to meet facility research specifications.	100% Compliance

C.2.2.22.2 Develop a schedule to show recurring testing of water and wastewater process control to ensure that facilities are operating correctly and are meeting permit requirements. Perform water and wastewater facility testing at least once in each eight hour period.

C.2.3 AREA SUPPORT

The SP shall provide necessary support services for the facilities and associated entities. The SP shall be responsible for but is not limited to the following requirements:

		BARC	USNA	NAL	PI/CM	CNJ	Mc	GD	USSS	A 580
C.2.3.01	Support Services	X								
C.2.3.02	Auditorium / Conference Room Management	X	X	X						
C.2.3.03	Building / Facility Oversight	X	X	X						
C.2.3.04	Centralized Facility Monitoring	X	X	X				X		X
C.2.3.05	Committee Support	X	X	X				X		
C.2.3.06	Demolition	X	X	X	X	X		X		
C.2.3.07	Energy Conservation	X	X	X				X		
C.2.3.08	Engineering Services	X	X	X	X	X		X		
C.2.3.09	Environmental Protection Programs and Services	X	X		X	X	X	X		X
C.2.3.10	Fuel Management	X	X	X				X		
C.2.3.11	General Support	X	X	X				X		
C.2.3.12	Housekeeping	X	X	X				X		
C.2.3.13	Incinerator / Waste Disposal Systems	X								
C.2.3.14	Locksmithing Services	X	X	X				X		
C.2.3.15	Mail and Information Distribution Service		X							
C.2.3.16	Materials Handling / Inventory	X	X	X				X		
C.2.3.17	Material and Supply Inventory, Acquisition and Disposal	X	X	X	X	X		X		
C.2.3.18	Safety, Occupational Health and Industrial Hygiene Services	X	X	X	X	X	X	X		X
C.2.3.19	Security Systems and Equipment Services	X	X	X	X	X		X		
C.2.3.20	Snow Removal / Site Preparation	X	X	X				X	X	X
C.2.3.21	Tram Operation		X							
C.2.3.22	Trash Removal Services	X	X	X				X		
C.2.3.23	Vehicle / Equipment Maintenance	X	X	X				X		
C.2.3.24	Waste Oil Removal	X	X	X						
C.2.3.25	Wildlife Management	X	X	X				X		
C.2.3.26	Work Operation Support	X	X	X				X		

BARC - Beltsville Agricultural Research Center; USNA - U.S. National Arboretum; NAL - National Agricultural Library; PI/CM - Presque Isle, ME and Chapman, ME; CNJ - Chatsworth, NJ; Mc - McMinnville, TN; GD - Glenn Dale, MD; USSS - U.S. Secret Service; A 580 - Animal Plant Health Inspection Services located in BARC building #580

C.2.3.01 SUPPORT SERVICES

C.2.3.01.1 Perform clerical, support services, and office automation duties as required by individual functional units. Maintain calendar and schedule appointments for the supervisor with authority to commit supervisor's time based on knowledge of his / her interests, commitments, and work schedule. Update bulletin board notices by removing outdated material and posting

notices as directed. Receive telephone calls, greet visitors, and direct to staff members only those contacts needing attention or action. Telephone calls for shall be answered by an individual during normal business hours according to BA Policy #03-03. Handle routine matters, and on basis of knowledge of the program(s) or operations, refer inquiries to appropriate personnel. Respond to routine and non-technical requests for information available from the files or other office records. Receive incoming correspondence and determine which should be brought to the attention of the supervisor, handled personally, or routed to other individuals. Review outgoing correspondence for procedural and grammatical accuracy. Maintain records on correspondence and action items to ensure timely reply or action. Be responsible for the clerical support to service provided personnel in connection with a variety of construction, design, research, supply, and maintenance services. Type, edit, retype, and format letters, memoranda, reports, manuscripts, research documents, charts, graphs, and forms from rough draft into final form ensuring accuracy with regard to format, spelling, grammar, punctuation, and distribution of copies. Compile, format, and produce facility newsletter. Compose correspondence in accordance with facility policies and guidelines. Establish and maintain the office filing system(s) to meet program needs for information storage, archiving, and retrieval. Prepare and type in final form office administration forms and related documents. Determine supplies needed for the office, prepare the necessary paperwork, and receive and distribute supplies and special order items. Arrange for office equipment repairs by contacting appropriate vendor or responsible party and preparing related paperwork. Arrange travel, including scheduling transportation, making room reservations, preparing travel authorizations and itineraries, and preparing travel vouchers. Arrange conference meetings by securing conference space, notifying attendees, providing necessary supplies and equipment, assembling reference materials, and handling any associated paperwork. Comply with directives and instructional material pertaining to administrative practices and clerical procedures in order to be aware of new or revised procedures related to the preparation and processing of correspondence, forms, and reports; filing; mail procedures; travel vouchers. Bring important changes to the attention of the appropriate staff members. Provide support services to both the SP and Government personnel. Use Governmental software systems for travel, procurement, budget, and time and attendance for Government employees serviced by the SP.

Performance Objective	Threshold
Procure office supplies, services, and materials to minimize negative effects on productivity.	95% Compliance
Answer telephones in accordance with BA Policy #03-03.	95% Compliance
Provide Communication / Correspondence in accordance with agency and area standards.	95% Compliance

C.2.3.02 AUDITORIUM / CONFERENCE ROOM MANAGEMENT / SPECIAL EVENTS

C.2.3.02.1 Coordinate and schedule the general use auditoriums, conference rooms, classrooms, assigned centers, and grounds used for functions and events such as staff meetings, lectures, opening ceremonies, dinners, and shows. Review objectives of events and advises on necessary equipment to accomplish goals. Provide customer assistance and support to employees, customers, guests, and visitors to the concerned facilities. Provide pertinent information and assist in the meeting the customers' needs such as organizing and preparing, ensuring needed supplies / equipment are available and in working order (flip-charts and markers, projectors, computer

access, chairs, tables). Provide program support to include loading of programs, presentations, etc, to ensure materials can be presented to audiences.

Performance Objective	Threshold
Ensure that conference rooms or exhibit / meeting locations are set up according to requestors' requirements and in advance of scheduled events.	95% Compliance

C.2.3.02.2 Maintain and manage the audio-visual equipment. Assure the proper function of systems. Set-up and fine-tune video equipment and related audio equipment, adjusting as necessary for optimum quality. Perform minor cleaning, preventive maintenance, troubleshooting, and repairs to keep the equipment in working order. Investigate and plan for repair to equipment as needed. Deliver, set-up, and operate as needed. Maintain area's video tape library. Set-up and operate tele / video conferencing.

C.2.3.02.3 Receive and review requests for photocopying and fax equipment. Maintain photocopying and fax equipment. Maintain supplies of toner and paper and perform routine maintenance functions. Assure that requesting documentation is complete and accurate.

C.2.3.02.4 Operate and adjust satellite dish antennas and equipment to exact coordinates and tunes equipment to achieve optimum signal clarity in order to receive satellite broad cast programs. Perform various technical troubleshooting techniques to ensure satellite programming is down-link and recorded. Ensure satellite program monitors in various locations are connected and receiving a proper signal. Monitor and control satellite dish antenna maintenance agreement and ensure monthly checks are performed on the system to keep it operating at peak performance. Ensure that periodic maintenance on dishes is performed as required.

C.2.3.02.5 Serve as the primary contact for the installation of indoor and outdoor educational and art exhibits. Discuss logistical problems and considerations with exhibitors and resolves the issues to the satisfaction of the exhibitor and to meet facility exhibit standards. Configure or reconfigure spaces and items for exhibits and programs. Hang and display exhibits. Ensure that exhibit material such as hangers, risers, and easels are available and in good condition. Transport and assemble facility exhibits to off-site events.

C.2.3.02.6 Coordinate services required for ceremonies and special events. These ceremonies and special events necessitate work including but which is not limited to decorating and clean-up, electrical support for the duration of the event, power requirements for entities (bands, vendors, sound equipment, display booths), internet access support, stage assembly, fabricating signs, installing and removing banners and signs, preparing flyers and programs, and contacting and arranging for food service vendors. Support ceremonies and special events to include performing tasks that include but are not limited to policing grounds, shuttle services, registration, and calculating booth sizes, tables, chairs, and other participant requirements. Special events may include BARC Public Field Day (1st Saturday of June), building dedication ceremonies, ground breaking ceremonies, tree planting events and dedications, retirements, and special lectures, conferences, workshops, symposiums, and dignitary programs.

Performance Objective	Threshold
Coordinate services required for special events / ceremonies to ensure all requirements are met.	90% Compliance

C.2.3.03 BUILDING / FACILITY OVERSIGHT

C.2.3.03.1 Perform services required to oversee and manage services performed at the facilities. Act as a liaison between any SP, occupants, and the Government. Duties shall include but are not limited to the inspection of maintenance, repair, and construction projects; fire extinguisher inspection; inspection of materials to ensure compliance with plans and specifications as to grade, composition, dimensions, consistency, value, or other characteristics; inspection of services provided by outside support; field surveys; and documentation and reports.

C.2.3.03.2 Provide maintenance and repairs to ensure comfort and safety of staff and properties. Locate source / vendors to provide maintenance and repairs, assign work, and ensure completion. Maintain files / records of action. Ensure that all safety requirements are enforced. Provide space management services, relocation, expansion, and renovation assistance. Provide for the needs of: office furniture, support equipment, repair supplies, hardware, pick-up and return services. Assist engineers with projects as the projects pertain to individual facilities.

Performance Objective	Threshold
Ensure that all safety requirements are enforced.	100% Compliance

C.2.3.04 CENTRALIZED FACILITY MONITORING

C.2.3.04.1 Maintain, staff, and update an on-site computer-operated building automation system (BAS) centralized station and a building management network for the monitoring of essential building activities and critical equipment such as but not limited to building and equipment environmental alerts, alarms, malfunctions, and fire alarms for facilities and specified equipment. Staff the centralized monitoring center 24/7. Provide personnel to provide initial response to trouble, faults, and emergencies for the same continuous time in addition to the monitoring personnel. Provide first-line response to alarms and emergency calls for service. In the event an occurrence happens in a high consequence area or sensitive information is involved, the SP shall provide an approved / cleared employee to perform the work or escort other individuals that are performing the service. During emergency situations, until appropriate emergency personnel arrive, the monitoring personnel shall act as a localized dispatching element to organize and route personnel and equipment to areas of concern. Take a supportive role and assist local authorities once relieved by emergency personnel.

Performance Objective	Threshold
Staff and maintain an on-site computer-operated BAS centralized station and a building management network for the monitoring of essential building activities and critical equipment 24/7.	100% Compliance

C.2.3.05 COMMITTEE SUPPORT

C.2.3.05.1 Participate in committees (permanent and temporary) throughout the operation such as but not limited to Beltsville Area Animal Care and Use Committee (BAACUC), Ecology Committee, security and safety committees. Provide a permanent member to committees in which the SP tasks are actively involved and provide committee support for meetings to which the SP has been invited by the Government staff. (See Appendix H)

C.2.3.06 DEMOLITION

C.2.3.06.1 Provide demolition services for structures approved by the Government. Serve as Project Coordinator for the demolition of buildings and structures upon approval of the Maryland Historic Trust, NCPC, D.C. Historical Preservation Commission, and COR. Follow specific guidelines set forth by Federal, state, local, and facility regulations for the preparation, demolition, and disposal of debris. Ensure all measures are taken in the preparation, demolition, and clean-up phases to protect the personnel and environment from lead and asbestos that may be contained in the structure. Address all precautions and mandatory regulations for the lead and asbestos abatement process. Disconnect utilities and salvage serviceable equipment prior to demolition. Maintain documentation pertaining to the building / structure being demolished, including erosion and sediment control permits, Maryland Historic Trust, NCPC, and D.C. Historical Preservation Commission approval. Work the site and improve to integrate with surrounding area after demolition. Refer to Appendix F, Demolition Plan, for a listing of BARC structures approved for demolition during the timeframe of this statement.

Performance Objective	Threshold
Schedule demolition services in accordance with the annual Government-scheduled demolition priority list.	95% Compliance

C.2.3.07 ENERGY CONSERVATION

C.2.3.07.1 Research, evaluate, develop, coordinate, implement, and maintain the facilities energy conservation program in an effort to abide by the Governmental energy conservation requirements and to ensure the most economical energy costs. Ensure that the facilities are in compliance with executive and congressional mandates and other agency directives, EO 13123 (Greening the Government Through Efficient Energy Management), FAR 41 (Acquisition of Utility Services), and FAR 23.704 (Application to Government-owned or Leased Facilities). Provide technical advice and assistance for energy conservation matters relating to the implementation of energy conservation measures.

C.2.3.07.2 Review and update the existing Energy Management Program (EMP) (specific criteria and standards for energy consumption such as water, sewer, fuels, electricity, and steam) annually. Distribute the EMP to departments, institutes, and offices and develop and conduct seminars for facility employees (Governmental and SP) on energy conservation. Develop and maintain close liaison with other departments and offices to ensure compliance with the written EMP and implement energy conservation retro-fits. Perform research, analysis, reports, consultation, and advising in techniques designed to eliminate waste and improve energy

consumption. Maintain energy consumption records and compile reports and graphs to present for system operational efficiency analyses, comparison of degree days, pre-determination of utility bills, verification of past annual consumption and costs, and proposed budget.

Performance Objective	Threshold
Submit all data necessary to complete required submittals, reports, permits, and responses to regulatory authorities within imposed time requirements.	100% Compliance

C.2.3.07.3 Monitor electrical energy consumption. Identify major deviations, discover probable causes, and recommend solutions which may include operational changes, system modifications, and any expedient change or long range plans for a cost- effective solution which conserves energy without sacrificing requirements for conserving valuable research. Develop energy projections for the next fiscal year's budget by March 31 of each fiscal year. Serve as liaison with power and public utility companies regarding new service, service changes, and billing data. Review correspondence and billing for accuracy and possibilities for load reduction, duty cycling, peak usage reduction, and other energy conservation measures.

Performance Objective	Threshold
Maintain energy consumption records and review all corresponding bills for accuracy and energy conservation savings potential.	100% Compliance

C.2.3.07.4 Serve as the Executive Secretary for the Energy Management Committee and participate in the periodic meetings. Conduct frequent building and equipment inspections and issue reports on specific findings on inefficient use of energy and recommend corrective action. Promote energy awareness and energy conservation education for facility employees through article publications in the facility newsletter, seminars, and memoranda distribution to employees.

C.2.3.07.5 Coordinate with the Department of Energy (DOE), General Services Administration, Commerce Department, Bureau of Standards, Washington Gas Company, and PEPCO on matters pertaining to energy standards, development of new energy conservation techniques, obtaining grants or other monetary compensations for energy conservation programs, and general research of energy consumption problems.

C.2.3.07.6 Maintain a universal centrally-monitored and computer controlled-design automated energy management system for strategic cost savings and energy reduction. Research, develop, and implement controls and systems for self-sufficient units.

C.2.3.07.7 Coordinate, effectively implement, and ensure contract compliance of the ESPC projects. Initiate and implement actions that will result in a successful ESPC. Tabulate statistical data associated with ESPC. Ensure that facility components covered by the ESPC meet efficiency codes, standards, and guidelines.

Performance Objective	Threshold
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Performance Objective	Threshold
Ensure facility components covered by the ESPCs meet efficiency codes, standards, and guidelines.	100% Compliance
Be responsible for the overall coordination and effective implementation of the existing ESPCs including all integral projects and programs.	85% Compliance

C.2.3.07.8 Perform the following duties in regard to the ESPC: verify contractor's savings Measurement and Verifications (M&V) methods; review M&V approach and provide feedback to the COR or designated authority; calculate savings and review savings calculations with that of the contract prior to assessing claimed savings; monitor and establish baseline equipment and conditions; and review annual measurement and verification activities. Detail how calculations will be made, to include equations.

C.2.3.07.9 Perform the following annual verification and measurement activities in regards to the ESPC: risk allocation process; usage characterization; minimizing uncertainty cost-effectively; balance M&V rigor with project risk; and annual contract measurements. Conduct annual calibration of measurement equipment to ensure accurate readings.

Performance Objective	Threshold
Conduct annual calibration of measurement equipment to ensure accurate readings.	100% Compliance

C.2.3.07.10 Evaluate contractor ECMs for the following in regard to the ESPC: technical feasibility and acceptability, sound assumptions and engineering principles in energy analysis, backup documentation on energy and Operations and Maintenance (O&M) savings, acceptable impacts and facilities and operations, environmental impacts, reasonable project sites and measures, reasonable pre- and post-baseline conditions, adequate and acceptable performance period M&V approach, acceptable dispute resolution approach, responsibility for M&V activities and preparation of analyses and documentation, technical risk of project, hedge or lock for incidental rates, proposed guaranteed annual cost. Evaluate guaranteed annual cost savings and annual contractor payments and total price to ensure completeness and appropriate implementation cost. Evaluate for reasonableness, consistency, and supporting documentation on ECM implementation price and performance period expenses and ensure price increase and financing rate are within maximum. Evaluate utility rebates. Assist in the consideration of annual or quarterly payments to the ESPC contractor.

C.2.3.07.11 Ensure contract agreements are delivered as proposed. Deliverables shall include training, equipment and component inspection and acceptance, proper following of energy use and operating schedules, prompt addressing of maintenance problems and questions, and scheduled equipment renovation and replacement.

C.2.3.07.12 Conduct follow-up monitoring to ensure the Government is obtaining full value from the energy performance contract. Coordinate inspections to verify that specified equipment has been installed and operating properly.

Performance Objective	Threshold
Follow up on ESPC performance to ensure guaranteed savings are received by the Government or provide necessary information for quarterly payment adjustments.	100% Compliance

C.2.3.07.13 Document losses and / or savings. Ensure thorough documentation is complete and accurate to support savings. M&V shall support the calculations to include utility cost verifications. These reports shall be submitted to the COR or designated authority.

C.2.3.08 ENGINEERING SERVICES

C.2.3.08.1 Provide civil, mechanical, electrical, structural, and environmental engineering and architectural services. Provide specialty engineering services for complex laboratory, greenhouse, and animal facility engineering and design. Maintain engineer management systems, business / work management systems, and databases. Provide design services, work management, construction management, construction representation, inspection, and contract inspection of management services. Manage activities associated with new construction / modification of facilities such as but not limited to structure erection, installation, or assembly of new real property facility; the addition, expansion, extension, alteration, conversion, or replacement of facility structures and the relocation of a real property from one installation to another.

Performance Objective	Threshold
Ensure implementation of civil, mechanical, electrical, structural, and environmental engineering and architectural services in compliance with USDA design criteria.	90% Compliance

C.2.3.08.2 Provide a broad range of services dedicated to providing efficient and timely real property maintenance and repair, programming, project design, and construction management for the facilities. Provide attractive, comfortable, functional, safe, and code-compliant outcomes for the facilities. Maintain facilities' projects program for facility infrastructure improvement, modernization, and major repairs. Provide necessary analysis, documentation, and posting of system changes to ensure the integrity and validity of facility databases (Job Order Tracking System (JOTS)). Review on a regular basis installation-level regulations, policies, and guidance associated with real property management and as appropriate submit recommendations for changes to the COR or designated representatives. Prepare, coordinate, staff, and arrange for publication of revised installation-level regulations, policy, and guidance once approved by COR. Ensure that performance levels are in compliance with federal, state, and local directives and codes and ensure work quality is in accordance with applicable standards and guidelines.

C.2.3.08.3 Maintain a facility engineering management system.

C.2.3.08.3.1 Develop and maintain a current comprehensive facilities management system which integrates the following elements into a readily accessible central database of information to provide relevant up-to-date, accurate data for planning and implementation of facility activities as well as support to associated farming activities:

- BA and NAL Master Plans;
- Facilities and Land Management Computer system;
- Geographical Information System (GIS);
- Facilities Information for Real Property Management system;
- Building Owners and Managers of America standard method for measuring floor area as adopted by the General Services Administration in 1996; and the
- Programmatic Agreement for the Preservation and Maintenance as required by the National Capital Planning Commission of the 2001 Master Plan.

Performance Objective	Threshold
Maintain current facilities management systems for planning and support of facilities and farming activities.	100% Compliance

C.2.3.08.3.2 Maintain official maps, utility maps, topographic maps, grid marker systems, and graphical real property facility records. Retrieve database information and produce required database reports, graphical prints, utility site maps, and installation site maps. Modify and update maps and as required create, import, and update graphical facility records using computer-aided design and drafting (CADD) / GIS or a Government-compatible system. Field-verify installation and utility maps and graphical real property facility record data to ensure accuracy and currency. Verify and update any discrepancies found during the field-verification. Modify or delete existing facility structures or land plots from mapping system as approved by CO or designated representative. Print requested maps and submit to authorized requestors. Identify real property, acres, square footage, linear footage, and boundary lines to specific maps. Locate and mark underground cable, piping, valves, tanks, or other utilities within 18 horizontal inches of the actual location. Provide general oversight to contracting firms that perform duties on the facilities. Assist contractors in locating utility lines and establishing or disconnecting power sources, water, and other utilities.

Performance Objective	Threshold
Retrieve database information and produce required database reports, graphical prints, utility site maps, and installation site maps within 1 hour of notification.	100% Compliance
Physically locate underground utilities within 1 hour of notification. Performed with 100% accuracy.	100% Compliance

C.2.3.08.3.3 Maintain, account for, and retrieve as required the existing inventory of plans, drawings, essential regulations, specifications, codes, standards, and other technical data (manufacturer's operating and maintenance manuals and parts lists, project contract specifications, data-plate submissions, preventive maintenance, inventory, location, maintenance schedules, and checklists) for an installation facilities reference library. Maintain as-built drawings for new construction and facility alterations to include electrical and mechanical systems and maintain an inventory of materials, retrieval system, and a method for posting changes. Material and information remain the property of the Government throughout the contract and thereafter.

Performance Objective	Threshold
Maintain the facilities reference library in a filing / retrieval system in order to acquire documents within 1 hour.	95% Compliance

C.2.3.08.3.4 Receive from designers and contractors new design drawings, as-built drawings, and file them as a reference and convert non-electronic submitted drawings into an electronic format.

C.2.3.08.4 Perform facilities engineering studies and technical consultation and provide associated reports in response to Government-approved work requests in such a manner as to economically maintain the infrastructure in support of the mission. Certify consultations and engineering studies by an applicable Licensed Professional Engineer knowledgeable of the installation and the facility infrastructure. Perform technical consultations to include major professional studies for planning, investigations, and surveys. The work shall involve civil, structural, mechanical, electrical, environmental, architectural, and sanitation engineering efforts in varying degrees. Additional engineering specialty areas for which the SP shall be responsible may include corrosion control, energy systems, cranes, towers, fire protection, secure communication, biological research support to include contaminated utility systems, and intrusion detection.

C.2.3.08.4.1 Perform professional engineering services regarding a variety of engineering planning estimates and resolution of design, construction, and equipment problems. Develop critical project development packages for submission to the COR to include complete requirements, justification, and environmental compliance criteria.

C.2.3.08.4.2 Perform studies based on sound engineering practices, up-to-date technology, current industrial standards, and the governing Federal, state, and local codes. Documents shall be complete, accurate and editorially correct; shall be property of the Government; and shall be released only with the Government approval. Studies include but are not limited to Real Property Facility Deficiency; Space Utilization; Traffic / Parking; Force Protection and Security Engineering; Flood Plain / Storm Water Management / Forestation; Utility Systems; Handicapped Accessibility; Architectural, Mechanical, Electrical, and Structural Systems; Decontamination of Hazardous Substances; Boundary Verification; Lead and Asbestos Abatement; and Environmental / Weather Evaluation.

C.2.3.08.5 Provide design services.

C.2.3.08.5.1 Conduct and submit to the COR or designated representative for approval project planning and design to include: conducting, coordinating, and scheduling site visits; consulting with requestor and users; recommending classification of proposed work (maintenance, repair, minor construction, alteration, or other engineering services); recommending establishment of project cost; obtaining appropriate Real Property Planning Board / Commission, environmental (particularly sediment and erosion control), fire, safety, occupational health, biological research, and other regulatory / statutory coordination approval and permits; obtaining approval of, and being in accordance with the Maryland Historical Trust, NCPC, Maryland-National Capital Park and Planning Commission (M-NCPPC) Master Plan, and United Federal Specifications System;

determining information system requirements; developing proposed project scope of work documents to include preliminary project cost estimates; and recommending value engineering considerations. All structural and facility designs shall be in accordance with Federal, state, and local building codes and regulations required as a result of animal care and usage.

Performance Objective	Threshold
Consult with regular statutory and planning organizations in the development of all proposed projects.	90% Compliance

C.2.3.08.5.2 Conduct project design development and submit to the COR or designated representative for approval. Development may include but is not limited to ensuring project design is in compliance with construction, environmental, fire, safety, security, and information systems standards and requirements, finalizing scope and quantification of requirements; developing contract documents to include scope of work, project drawings, site plans, technical specifications, cost estimates, liquidated damages, and bid schedule; obtaining appropriate review, coordination, and formal approval; and establishing project milestones.

C.2.3.08.5.3 Provide project design support services to include submittal review, maintaining design, modification, and approval documentation. Close out design folders upon project completion, and update and maintain required project information. Provide CADD support services to include preparing drawings and designs of real property facilities, systems, and equipment; reviewing outside prepared drawings and CADD files; validating Project Final and As-Built CADD files; entering drawings revisions into the master drawing file; establishing and maintaining an index of levels displaying equipment, component locations, doors, and windows; and maintaining and controlling CADD files and drawings using AutoCAD REL 2000 or higher.

C.2.3.08.6 Provide project management, construction representation and inspection services.

C.2.3.08.6.1 Provide contract management, construction representation and inspection services for services, maintenance, repair, and alteration projects throughout the facility units and institutes. Ensure project compliance with contract specifications including quality of service. Follow-up on complaints and verify validity of the complaint prior to resolution of situation with contract supervisor; analyze deficiency reports before recommending changes in operational procedures, quality control, and inspection practices; write inspection reports and other communications as necessary to inform the Government of contractor performance; and make recommendations on daily operations and services. Provide oversight for existing contracts that support facilities and equipment. The existing contracts cover the following tasks:

- Custodial / Janitorial (BARC, USNA, NAL)
- Vending Machine – Small Cafeteria / Break Room (BARC, USNA, NAL)

Recommend to the COR or designated representative appropriate contract method to meet specific maintenance, repair, minor construction, and alteration requirements. The SP may not bid on efforts for which it provides services at the facility within the scope of work of this PWS. The COR shall determine those projects which the SP may offer to outside sources rather than providing the services directly.

Performance Objective	Threshold
Manage contractual services in accordance with the terms of the contract / work orders within the allotted schedule and costs.	95% Compliance

C.2.3.08.6.2 Submit to the COR or designated representative for approval contractual requirements, project funding requirements, and scope of work for Architectural and Engineering (A&E) service announcements. Develop and submit to the COR or designated representative for approval A&E selection evaluation criteria and answers to A&E Request for Information (RFI) and recommendations to A&E qualifications and proposals. Participate in progress meetings.

C.2.3.08.6.3 Participate in the establishment of contract-type services for maintenance, repair, services, minor construction, and alteration requirements. Develop and submit to the COR or designated representative for approval; contract specifications, standard detail drawings using CADD, sample task orders for bid by potential contractors, evaluation of contractor bids on sample task orders, evaluation of contractors bids / proposals to determine over-pricing of commonly used items and under-pricing of infrequently used items, and recommendations on selection of contractors. Ensure that contract documents include compliance with construction, environmental historical, fire, safety, security, information systems standards and requirements; technical specifications; Independent Government Estimate (IGE); liquidated damages; bid schedules; and appropriate review, coordination, and approval.

C.2.3.08.6.4 Prepare orders and maintain documentation to be placed against contract services as directed by the COR or designated representative. Develop and submit to the COR or designated representative for approval: Statements of Work, item descriptions, number of units, specifications, independent estimate of Government prices, quantities, and any required standard CADD drawings and details; and project milestones. Participate in pre-award meetings and site visits. Provide contract services to include maintaining original, modification, and approval documents; closing out order folders upon completion; updating and maintaining required project information; validating Project Final and As-Built CADD files, and entering drawing revisions into the master drawing file.

C.2.3.08.6.5 Provide contract oversight and inspection (quality assurance) and maintain project construction files with updated project status. Tasks may include but are not limited to reviewing and submitting recommendations to the COR or designated representative for approval of contractor's submittals for materials, equipment, procedures, designs, progress schedules, and Government quality assurance plans; attending pre-award and pre-construction meetings to assist in defining and reviewing the contractor's quality control plan, and installation policies and procedures; and coordinating utility outages and road closings.

C.2.3.08.6.6 Conduct in-process inspections and assist installation representatives and users in documenting deficiencies. Attend final inspection and obtain any user / equipment manuals, receive as-built information, and receive warranty documentation.

C.2.3.08.6.7 Obtain a receipt for contractor-conducted maintenance and repair training, manuals, tapes, and warranty program documentation upon the completion of the project.

C.2.3.08.6.8 Provide inspection service call-back support 24/7. Respond on-site within 1 hour of receiving notification.

C.2.3.08.7 Provide warranty determination services. Conduct warranty inspections and investigations to include discussing trouble call with requester, visiting site, validating issue, verifying issue is under warranty, and contacting supplier or COR or designated representative in writing to provide corrective action. Initiate approved corrective actions if item is not under warranty. Brief customers on warranty coverage for installed facility and research equipment and notify the COR or designated representative to obtain warranty servicing. Maintain a warranty log to include warranty clauses and expiration date for all equipment installed by facility and research staff. Monitor and analyze deficiencies in maintenance and repair projects identified during warranty periods and report to the COR or designated representative.

Performance Objective	Threshold
Maintain warranty documentation and initiate all issues of warranty determination and trouble calls within 1 hour.	90% Compliance

C.2.3.08.8 Coordinate and approve all Government approved work permits and permits requiring excavation on installation property required in support of real property maintenance, repair, or servicing.

C.2.3.08.9 Develop and implement annual work plans. Submit annually to the CO or designated representative by September 15 a facility-wide annual work plan in accordance with the current budget guidance or constraints no later than 2 weeks prior to the beginning of the fiscal year and update weekly to reflect changing priorities and funding levels. Ensure projects meet the procurement and project execution schedule as determined by the Government. Maintain information on the status of each project in an electronic system accessible to the Government and respond to inquiries. Include the annual work plan project title, estimated cost, priority, date of execution, code (R – Required by law, C – Critical, M – Mission Essential, O – Other), estimated completion date, and other coordination.

C.2.3.08.10 Perform coordination with respect to engineering and planning and environmental projects to other agencies, cooperatives, collaborators, and the like: Washington Suburban Sanitary Commission, U.S. Secret Service, University of Maryland, utility providers, U.S. Corp of Engineers, NASA, and state and local Governments.

C.2.3.08.11 Adhere to regulatory compliance requirements: ADA / UFAS, Maryland Historic Trust, NCPC, M-NCPPC Master Plan, D.C. Historical Preservation Commission, D.C. Environmental Health Administration, D.C. Fine Arts Commission, EPA, OSHA, National Environmental Policy Act, MDE, NFPA, Federal Emergency Management Agency (FEMA), and the ARS Design Guide and applicable policies and procedures.

C.2.3.08.12 Participate in the semi-annual animal facilities inspections in accordance with Animal Welfare Act, Natural Research Council's Guide and Use of Laboratory Animals, ARS policies and procedures, and the Federation of Animal Science Societies Guide for the Care and Use of Agricultural Animals in Agricultural Research and Training. Determine items or issues within the purview of repair and maintenance. Investigate and compile appropriate background data and information concerning the history of any recent repairs, service records, trouble calls, or any ongoing work request to annotate what if any remedial action has been made. Initiate service requests for repairs and alterations. Monitor the completion of work and update the Animal Care Inspection Report weekly.

C.2.3.08.13 Monitor and maintain budget accounts for the Renaissance – 93 (obligate the funds on a quarterly milestone basis) and other modernization projects. Develop budget recommendations which shall include projected facility needs. Compile and prepare special fiscal reports used to prepare budgetary / funding reports required by Government authorities. Coordinate activities related to the budget with the Area Administrative Office and serve as a contact point for requests from the Area Administrative Office concerning the budget. Ensure that research needs are met throughout the process, from design to completion of project. Participate in facility planning committees that advise and assist in planning and implementation of projects. Provide liaison function with Agency headquarters for projects exceeding \$1 million, which is the Beltsville Area authority limit for A&E contracts. Coordinate participation of facility personnel in ensuring research needs and goals of projects are met.

C.2.3.08.14 Requests for design, engineering and planning services that involve contract preparation and utilization of Government contracting and procurement staff shall abide by the following cutoff dates established by the Beltsville Area:

<u>Dollar Amount</u>	<u>Required to Government by:</u>
Under \$2,500	September 1, 200X
\$2,501 - \$25,000	August 1, 200X
\$25,001 - \$100,000	July 1, 200X
Over \$100,000	April 1, 200X

C.2.3.08.15 Monitor service agreement contracts as approved by the CO or designated authorities with the responsibility of tracking and allocating funds for projects through the procurement process. Prepare documentation for contract funding and keep updated files and records pertaining to contractor's performance. Receive contractor's invoices and review payment request for compliance of the contracted terms.

C.2.3.08.16 Review environmental assessments and provide assistance and consultation to neighboring agencies including National Aeronautics & Space Administration (NASA), USSS, APHIS, U.S. Geological Survey (USGS), University of Maryland Hayden Farm, and USDA George Washington Carver Center. Cooperate and participate in partnerships and cooperatives with regulatory agencies.

C.2.3.08.17 Honor and maintain required permits associated with the service and maintenance requirements of this PWS. Perform requirements associated with permit renewal process and

participate in the formulation of new permits and subsequent requirements on the facility as a result of these permits.

C.2.3.08.18 Provide customers with a monthly report showing project repair and maintenance costs, major maintenance and minor construction charged to the accounts during the previous month and the status of work requests and service requests submitted by the customer. The report shall be delivered no later than the 10th day of each month.

C.2.3.09 ENVIRONMENTAL PROTECTION PROGRAMS AND SERVICES

C.2.3.09.1 Plan, implement, operate, and promote actions or programs including training to provide advice and technical support in the following:

- Clean Air Act; Clean Water Act / Safe Drinking Water Act (Potable Water); National Environmental Policy Act (Construction Projects, Ecology / Natural Resources Program, Environmental Compliance Assessment); Environmental Management System, Pollution Prevention Program; Affirmative Procurement Program; Environmental Preferability Program; Recycling.

C.2.3.09.1.1 Expand the Clean Air Act program, identifying components necessary for compliance with all applicable Federal, state, local, and agency regulations and policies. Oversee collection of data and preparation of annual air emissions report to MDE.

Performance Objective	Threshold
Comply with BARC facility boiler permit. Annual air emission report shall be delivered to the COR 10 days prior to MDE deadline.	100% Compliance

C.2.3.09.1.2 Expand the Clean Water Act / Safe Drinking Water Act program, identifying components necessary for compliance with all applicable Federal, state, local, and agency regulations and policies.

C.2.3.09.1.3 Carry out programs to comply with National Environmental Policy Act and related requirements. Conduct Environmental Assessments, Environmental Impact Statements as necessary for construction projects and maintain associated files. Maintain Natural Resources Program (e.g., wildlife / waterfowl census, wildlife observation, vegetation evaluations, banding / tagging, natural baselines, flora and fauna surveys, etc.). Participate in BA Ecology Committee. Recommend enhancements to the NEPA and Natural Resources Programs for consideration and approval as additional work.

C.2.3.09.1.4 Coordinate activities of the Environmental Management System (EMS). The EMS combines the goals of Executive Order 13148, the recommendations of the Government, and the benefits of the research programs that are protective of the Chesapeake Bay Watershed. The EMS must advance stewardship of natural resources by using sound management systems and supporting the research that reduces impacts of agricultural production on the Chesapeake Bay Watershed. The EMS is integral with the Pollution Prevention Program.

The Environmental Management System (EMS) (C.2.3.09.1.4) has been developed for BARC. The other facilities covered by this PWS, although not part of BARC's EMS, must comply with all applicable regulations, policies, Executive Orders, etc. and SP shall provide support as described in C.2.3.09.1. All BARC environmental management programs are under the umbrella of the EMS. As described in BA Policy #02-07, the Pollution Prevention Program is integral with the EMS. Newer programs, such as the Environmentally Preferable Products and Affirmative Procurement Program (BA Policy #03-04), are automatically subsumed by the EMS. The BA Policy #02-07 will be updated periodically to reflect these expansions.

Performance Objective	Threshold
Components of the EMS are integrated and activities are clearly coordinated. Status of EMS is kept current for evaluation.	95% Compliance

C.2.3.09.1.5 Administer the Environmentally Preferable Products and Affirmative Procurement Program. This includes but is not limited to recycled-content products, biobased products, and energy-efficient products. When the USDA implements a procurement preference program for designated biobased products, the BA program will adhere to it. The facility program will strongly promote the use of recycled and recovered materials identified in the EPA comprehensive Procurement Guidelines (<http://www.epa.gov/epaoswer/non-hw/procure/index.htm>). These items are seen as the minimum that should be considered when evaluating recycled / reuse materials. The SP will demonstrate leadership in the use of biobased and energy-efficient products recommended by EPA and the Office of the Federal Environment Executive. The only time these products should not be considered is when they are cost prohibitive, not available within the required time frame, or fail to meet necessary performance standards.

Performance Objective	Threshold
The EMS motivates and measures participation. Opportunities are sought to increase use of Environmentally Preferable Products.	90% Compliance

C.2.3.09.2 Provide advice, guidance, and inspection services to management, supervisors, and employees in the chain of command in which the SP operates and occasionally to other departments, organizations, and agencies in regard to environmental protection programs. Monitor compliance with all associated permits with regulatory authorities, to be proactive monitoring of permit requirements and in submittal of required reports. Advise of impending changes in Federal, state, local, and Agency regulations and policies, and of actions to ensure compliance.

C.2.3.09.3 Generate letters, memoranda, safety procedures, special reports, training forms, procurement requests, personnel actions, and other related services in support of the above training and programs as well as the Area Safety and Health Manager's tasks.

C.2.3.10 FUEL MANAGEMENT

C.2.3.10.1 Ensure safe and efficient use of fuel sources utilized on the facility. Government furnished fuels include gasoline, biodiesel, diesel (where biodiesel is unavailable), fuel oils, propane, kerosene, and natural gas. Ensure fueling stations are maintained and meet Federal, state, and local environmental regulations. Design, construct, monitor and report each fueling station / site as a requirement of law.

C.2.3.10.2 Coordinate with local fuel vendors to determine the most efficient fuel source and utility mandate. Relay the information to affected utility service plants as to which fuel source to switch. Utility fuel sources consist of fuel oil, biodiesel, and natural gas. A PEPCO energy curtailment could mean switching to generators or co-generators. Services shall be switched due to two possibilities: Energy Conservation Program or utility service provider mandate.

C.2.3.10.3 Establish and implement a schedule for the delivery of fuel oil, biodiesel, gasoline, propane, and kerosene in accordance with federal, state, and local requirements and guidelines. Ensure adequate fuel inventory at all times to support the facility without interruption. This schedule will include the inspection and recording of each delivery. Maintain records of fuel consumption to assist the Government in determining annual usage. Accompany and monitor deliveries to ensure correct amount and that no spill occurs. Provide and maintain contingency plan for spill response efforts; if a spill occurs immediately initiate proper containment measures and cleanup efforts. Maintain and repair the “Gas-boy” fuel dispensing system.

Performance Objective	Threshold
Ensure delivery of fuels to support the facility without interruption. Ensure correct delivery amounts and maintain consumption records.	100% Compliance

C.2.3.10.4 Maintain and assure the quality of above and underground fuel storage tanks and their contents. Maintain tanks through maintenance repairs, cleaning, and replacement. Monitor fuel transfers and identify and alleviate water infiltration. Perform and monitor precision testing. Coordinate tank shutdowns and provide temporary backup. Inspect materials, equipment, and projects to ensure compliance with EPA and MDE regulations, USDA / ARS guidelines, and other related requirements. Monitor removal / quantities of contaminated soil, water, fuel, gravel, and tanks. Be responsible for tank monitoring equipment, tank systems, cathodic protection, automated monitoring, and other requirements of the above authorities.

C.2.3.10.5 Utilize alternative fuel to ensure compliance with the DOE. Use biodiesel in facility vehicles and equipment to comply with the Energy Policy Act (EPAct) of 1992, EO 13123. Research and implement, with the COR or designated representative approval other means and uses of alternative fuels in an effort to reduce dependence on imported petroleum and improve air quality. The U.S. DOE classifies the following fuels as “alternative fuels”: biodiesel, electricity, ethanol, hydrogen, methanol, natural gas, propane, p-series, and solar energy.

C.2.3.10.6 Assist area management in the development of the energy budget.

C.2.3.11 GENERAL SUPPORT

C.2.3.11.1 Perform general duties and practices associated with the facility to assist building occupants in day-to-day activities such as but not limited to forklift services; loading and unloading bulk materials; providing a back-up driver for the USDA Visitor Center; assembling and disassembling furniture; moving and relocating boxes, equipment, and furniture; and hanging and displaying exhibits, pictures, and plaques.

Performance Objective	Threshold
Provide ample staffing to perform general support duties as required.	90% Compliance
Perform general duties associated with the facility to assist occupants in day to day activities with “good customer service” as a high priority.	100% Compliance

C.2.3.11.2 RESERVED

C.2.3.12 HOUSEKEEPING

C.2.3.12.1 Perform general housekeeping in work areas. Keep areas free from accumulation of waste material and rubbish. General housekeeping refers to but is not limited to litter and debris control, sweeping, clearing spills, and organizing tools and equipment. Clean and restore areas in which work was performed by removing equipment, materials, and other unnecessary items.

C.2.3.13 INCINERATOR / WASTE DISPOSAL SYSTEMS

C.2.3.13.1 Maintain the incinerators and solid waste disposal equipment systems and infrastructure to include electrical, metal fabrication, and fuel supply lines. At the completion of the facility improvements structured by the ESPC, the SP shall be responsible for maintaining the alkaline hydrolysis tissue digester equipment and responsible for the waste line maintenance and treatment of the discharge to the WWTP. Assist and advise incinerator and waste disposal personnel on permits. Oversee the preparation of the Air Emission Report for the disposal process. Emission reports shall be submitted to the COR or an authorized representative (no later than 10 business days prior to the MDE due date) for review and submittal to MDE.

C.2.3.14 LOCKSMITHING SERVICES

C.2.3.14.1 Perform locksmith services for the facility. Install, repair, maintain, open, and replace key-operated locks (door closures, knobs, locks, buildings, offices, gates, desks, gas cylinder cages, toolboxes, safe and strong boxes, cabinets). Make keys and maintain key inventory. Fabricate keys only after approval of the COR or designated authorities. Maintain the master key inventory for each lock associated with the facilities’ re-key services, including master and secondary keys, as necessary. Respond to emergency locksmith calls 24/7 with in 1-hour of notification. Fabricate or repair parts that are worn or no longer available. Open file cabinets, desk drawers, office doors that have been locked and the key misplaced. Re-key door locks when safety or breaches are of Government concern. The re-keying process for one particular lock may

have influence on other locks' common locks and shall be re-keyed as appropriate. Provide a certified locksmith (both Maryland and D.C.) for performing these services.

Performance Objective	Threshold
Provide a certified locksmith to maintain key inventory and perform locksmith duties.	100% Compliance

C.2.3.15 MAIL AND INFORMATION DISTRIBUTION SERVICE

C.2.3.15.1 Receive interoffice Government envelopes, messages, and other forms of information originating at the facility and deliver to required destinations throughout the facility or to other facilities designated in the study. Sort and distribute mail from existing mail service contract. Frequency of mail delivery shall be in regard to existing contract delivery schedule with a minimum of one distribution daily.

C.2.3.15.2 Provide mail delivery services (mail, packages, and supplies) to and from the USNA and Central Receiving located at the BARC, NAL, the George Washington Carver facility in Beltsville, MD, APHIS, and designated District of Columbia addresses.

C.2.3.15.3 (USNA specific) Coordinate the handling of mail and parcels to ensure that methods used comply with the USDA, U.S. Post Office, and U.S. Customs requirements. Ensure that proper certifications accompany foreign or domestic shipments. Maintain and utilize postage machines and record daily postage usage in the PS Form 3602-A booklet. Coordinate and record requirements for small package shipments by commercial carriers.

Performance Objective	Threshold
Coordinate mail and parcels to ensure that methods used comply with the USDA, U.S. Post Office, and U.S. Customs requirements.	100% Compliance

C.2.3.16 MATERIALS HANDLING / INVENTORY

C.2.3.16.1 Provide inventory management and storage and distribution services for office and industrial supplies needed to fulfill the duties and tasks of the PWS and items that are delivered in support of scientific research.

C.2.3.16.2 Receive, process, and store general freight items for the facility and other agencies. Deliver or notify recipient of items no later than noon the following business day of receiving the item. Pick-up goods from local businesses. The SP shall inspect incoming freight to ensure that it is free from damage and conforms to the packing list, bill of lading, or other essential information. If damaged, the incident shall be reported to authorized and concerned personnel within 24-hours. Pack, crate, and prepare various freights including live plants for shipment and arrange for pick-up in accordance with shipping guidelines by means of U.S. Postal Service, United Parcel Service, Federal Express, and other heavy freight carriers.

C.2.3.16.3 Safeguard inventory against environmental elements, theft, and vandalism. Flammable materials, compressed gases, chemicals and sensitive items shall be maintained in segregated storage areas in accordance with Federal, state, and local regulations and facility policies.

Performance Objective	Threshold
Provide inventory management to protect against environmental elements, theft, and vandalism. Comply with all related safety practices and regulations.	100% Compliance

C.2.3.17 MATERIAL AND SUPPLY INVENTORY, ACQUISITION, AND DISPOSAL

C.2.3.17.1 Procure, acquire, and distribute equipment and materials needed to perform and support tasks stated in this PWS. Maintain a file for documenting and tracking purchases and equipment acquisitions. Proceedings shall be in compliance with Federal programs and regulations.

C.2.3.17.2 Perform duties related to the identification, reporting, and control of personal property. Ensure that all Government properties are accounted for, properly transferred, or disposed in accordance with the Federal Government and Central Excess Property Operation (CEPO) standards and procedures. Maintain documentation files on nonexpendable personal property. Document the Personal Property Management, inventory reconciliation, employee exit clearance inventories, and suspense report reconciliation. Document the acquisition, reallocation, and disposal of excess personal property. Reconcile, review, and inventory adjustment forms every 30 days. Identify and determine discrepancies. Receive and screen purchase orders (AD-838). Prepare and review inventory adjustment forms, including Report of Unserviceable, Lost, or Damaged Property (AD-112) and Report of Transfer or Other Disposition or Construction of Property (AD-107). Maintain a special inventory list. Assist in annual inventory.

Performance Objective	Threshold
Ensure that all Government properties are accounted for, properly transferred, or disposed in accordance with the Federal Government and CEPO standards and procedures.	100% Compliance
Reconcile, review, and inventory adjustment forms every 30 days.	100% Compliance

C.2.3.17.3 Conduct the required annual physical inventory with the Accountable Property Officers (APO). Initiate the inventory and walk through the services organization / laboratory with the APO or designee while the physical inventory is being conducted. Work with the APO to reconcile inventory and follow up as necessary.

C.2.3.17.4 Work with APO, research laboratories, and maintenance facilities in matters relating to acquisition and disposal of excess and surplus property and the reporting of lost,

damaged, or destroyed property. Visit laboratories, offices, and work sites to assist in determining the most economical means to meet the requirements and to inspect and survey excess property. Contact and visit General Service Administration (GSA), APOs and other supply sources periodically to determine availability of excess and surplus property for identified facility needs. Advise requesters of excess property or surplus availability. Screen excess property documents received to determine the appropriate action to take on the disposition of excess / surplus property. Coordinate the removal or transfer of excess property using necessary means. Notify certified technicians to remove Freon from unserviceable refrigeration equipment prior to disposition. Provide requesters appropriate forms in matters regarding acquisition, disposition, and transfer of nonexpendable personal property. Maintain and operate the scrap yard. Contact designated GSA representative to dispose of scrap material and make determination as to whether items have scrap value or should be disposed of in dumpsters.

Performance Objective	Threshold
Coordinate the removal of excess property in accordance with agency guidelines.	95% Compliance

C.2.3.17.5 Gather and compile data from property transactions processed during the month to contribute to the Area Property monthly Activity Report. Ensure that information is accurate and updated in the automated system.

C.2.3.17.6 Utilize the current Property Management Information System (PMIS) / Personal Property (PROP) database system to manage facility and shop inventories, suspense report purchases, National Financial Center (NFC) bar code assignments, motor vehicle and equipment acquisitions, disposal, excess, and transfers. Ensure that new accountable acquisitions are bar coded and entered into database.

Performance Objective	Threshold
Reconcile suspense reports in accordance with agency guidelines.	100% Compliance

C.2.3.17.7 Review request for changes, additions, or deletions to the telephone systems received from serviced organizations. Review AD-700's for content and feasibility, occasionally visits telephone sites (as needed), and forward approved requests to the area Information Technology (IT) / Telecommunications Section. Monitor request status and follow up as necessary to verify work completion.

C.2.3.17.8 Provide support to the ARS Tort Claims Program. Provide guidance to facility employees regarding tort claims. Assist the Area Tort Claims Representative with processing claims filed at the area.

C.2.3.17.9 Acquire, dispose, and move materials and equipment in compliance with Federal, state, and local requirements and guidelines such as the Federal Property Management Regulations (FPMR) Chapter 101 directives, guides, and manuals; BARC Policy #03-09; and Personal Property, Motor Vehicle, and Aircraft Management Manual 221.1M.

C.2.3.18 SAFETY, OCCUPATIONAL HEALTH AND INDUSTRIAL HYGIENE SERVICES

C.2.3.18.1 Promote and implement programs that provide training and education, advice, and consultation to the facility, and promote the adoption of policies, programs, and procedures that will safeguard human health and protect the environment. Provide guidance to other offices or organizations having overall responsibility for a project or program. Educate, advice, and provide technical support to the facility as the catalyst for the adoption of policies, programs, and procedures that will safeguard human health and protect the environment. Abide by pertinent Federal, state, and local regulations.

Performance Objective	Threshold
Conduct periodic multidisciplinary training to all facility employees as required by Federal, state, local, and agency regulations and requirements.	100% Compliance

C.2.3.18.2 Provide management, supervisors, and Government and SP employees with training (and safety publications as required) on the following programs:

- Pesticide Training (State Pesticide Applicators Certification, Worker Protection Standard), Chemical Hygiene Training, Hearing Conservation Training, Respiratory Protection Training, Hazard Communication Training, Control of Hazardous Energy, Confined Space Entry, New Employee Orientation, OSHA Thirty-hour OSHA Standards Training for Collateral Duty Safety Officers, Safety Committee Training, Supervisor Training to satisfy OSHA Basic Program elements, “Toolbox Talks” on specific topics (chain saw safety, etc.) upon shop request, and other training as mandated by regulations and as necessary based on current trends.

C.2.3.18.3 Make presentations at Agency Safety and Health Conferences. Participate in Agency Industrial Hygiene Committee. Assist in the development and distribution of ARS videos on safety, health, industrial hygiene, and environmental management. Maintain a facility video library on safety, health, industrial hygiene, and environmental management.

C.2.3.18.4 Provide advice, guidance, and inspection services to management, supervisors, and employees in the chain of command under which the SP operates and occasionally to other departments, organizations, and agencies.

Performance Objective	Threshold
Conduct periodic safety inspections of all workplaces, perform follow-ups as necessary, and maintain documentation in accordance with Federal regulations and agency policies and requirements.	100% Compliance
Conduct industrial hygiene surveys as outlined by ARS Policies and perform follow-ups as necessary and maintain documentation.	100% Compliance

C.2.3.18.5 Plan, implement, and operate actions or programs to provide consultation, advice and technical support in safety, health, and industrial hygiene. Maintain permits as required for individual programs. Respond to complaints from facility and SP employees.

- Construction and Engineering (Construction Safety, Design Review, Design / Construction Advice); Pesticide (Agricultural Chemical) Safety (support Greenhouse Committee and other users of agricultural chemicals); Chemical Hygiene Plan; ARS Industrial Hygiene Program; Hearing Conservation; Noise Surveys; Industrial Hygiene Services; Indoor Air Quality; Respiratory Protection; Accident / Incident Investigation and Reporting; Chemical Fume; Ergonomics; Fall Protection; Hazard Communication; Control of Hazardous Energy; Confined Space Entry, Personal Protective Equipment; Safety Awards; Area Safety Committee; Safety Inspections; Reporting of Unsafe and Unhealthful Working Conditions.
- Deer and Tick Prevention Program for a healthy environment for employees.

C.2.3.18.6 Oversee the facility Occupational Medical Surveillance Program for all qualified BA and NAL employees in accordance with ARS and BA policies, procedures, and programs. The services provided for this program is through a memorandum of understanding with the U.S. Public Health Service.

C.2.3.18.6 Generate letters, e-mails, memoranda, safety procedures, special reports, training forms, procurement requests, personnel actions, and other related services in support of the above training and programs, as well as the Area Safety and Health Manager's tasks. Perform associated research and planning to accomplish these services.

C.2.3.19 SECURITY SYSTEM AND SECURITY EQUIPMENT SERVICES

C.2.3.19.1 In support of the Physical Security Coordinator who sets policy and manages security matters for the Beltsville Area, conduct physical security surveys and threat assessment evaluations; prepare all statements of work for physical security applications or to correct installation or component deficiencies; educate and brief government personnel and contractor employees on security systems and equipment. Recommend physical security components (e.g., monitors, gates and fences, barriers, lighting, locks, and access controls) and cost-effective solutions to existing or future physical security system design or components. Install, maintain, troubleshoot, diagnose, and repair the facilities' access control systems, intrusion detection systems, video intercom systems, closed-circuit television monitoring systems, and electronically-controlled gates. Review and comment on all new construction and renovation design of physical security systems from the inception of the project. Perform regular audits of all security systems and generate usage reports. Perform these services on a wide range of security parameters to include shed storage, restricted fields, greenhouses, agricultural structures, quarantine areas, laboratories, and multistory buildings.

Performance Objective	Threshold
Troubleshoot / diagnose problems to ensure integrity of the physical security systems and initiate corrective actions within 1 hour.	100% Compliance
Make critical repairs immediately and non-critical repairs the next business day.	100% Compliance

C.2.3.19.2 Program and maintain all intrusion detection and access control systems. Establish and maintain a preventive maintenance program to ensure that building access control card readers (including battery back-up), exterior and automatic door operation, automatic gates (vehicle and pedestrian), exterior lighting systems, interior and exterior closed circuit television (CCTV) systems, and alarm systems continue to operate at the proper efficiency without interruption. Monitor each intrusion alarm system and fire and environmental zone system 24/7.

C.2.3.19.3 Ensure that security / access codes are issued and recorded in a secure manner. Manage the code system records and usage as employee turn-over occurs. Program and issue proximity entrance cards according to established procedure. Reissue new cards in the event cards are lost or damaged. Cancel lost cards immediately after notification. Run security code and electronic card access usage reports to initiate proactive troubleshooting and as requested by the Government.

Performance Objective	Threshold
Program and issue proximity cards within 7 calendar days of receiving a written request.	98% Compliance

C.2.3.19.4 Obtain, install, program, and have operational fixed or mobile panic buttons within 24 hours of the Government approved request.

C.2.3.19.5 Secure all records, codes, and other proprietary information. Provide bonded and insured personnel that possess adequate security clearances to enter areas which contain select agents.

C.2.3.19.6 (Specific to BARC) Organize and implement a system to issue temporary passes and vehicle permits to contractors / sub-contractors. Ensure that badges and permits are issued in accordance with Homeland Security and facility regulations and guidelines. Badges and passes may consist of temporary daily and multi-day.

C.2.3.20 SNOW REMOVAL / SITE PREPARATION

C.2.3.20.1 Establish and implement a procedure (including schedule and priority list) to provide a safe working environment for employees, continuation of animal care, and protection of facility property to allow research during snow-ice hazardous conditions. Maintain areas in order that snow accumulations do not exceed 2 inches. Provide operating procedure to COR or designated representative for approval prior to cold weather season. Perform snow removal to provide unrestricted access to scheduled animal feeding, health services, and areas where there are active research protocols as well as for general vehicle and pedestrian traffic flow (roadways,

parking lots, walkways, building entrances, bridges, handicap ramps, and steps). Scheduled animal feeding, health services, and research areas must be accessible on a continuous basis each day of the year including holidays and shut downs.

Performance Objective	Threshold
Adhere to approved established procedure for weather monitoring, mobilization, and implementation for snow removal.	90% Compliance
Provide unrestricted access to scheduled animal feeding, health services, and research areas.	100% Compliance

C.2.3.20.2 Monitor weather conditions to predict and prepare for winter storms. Prepare the facility with pretreatment, snow fencing, and road stakes prior to inclement weather seasons, and remove once the season has ended.

C.2.3.20.3 Maintain snow removal equipment prior to the inclement weather. A failure to comply with the requirement for preseason and pre-storm maintenance that causes slow and inadequate services resulting in road closures is not acceptable. Strategically position equipment throughout the facility for expected storms.

C.2.3.20.4 Snow removal for the facilities includes both Government and public access roads. In addition to facilities covered in the facility matrix, C.2.2, the SP shall perform snow removal / site preparation for the FDA, Building 580 APHIS, Patuxent National Visitor Center, and Department of Interior (DOI).

Performance Objective	Threshold
Provide maximum effort to remove snow from public access roads in order to prevent road closures.	100% Compliance

C.2.3.21 TRAM OPERATION

C.2.3.21.1 Operate, maintain, connect, inspect, and clean the 48 passenger tram which transports visitors on USNA tours on an established course with predetermined speeds and stops. Operate in accordance with USNA traffic and safety rules, regulations, operator's manual and prescribed policies. Ensure that the TRAM operator possesses a CDL operator's license with an air brake endorsement. Operate the tram system each weekend beginning on first weekend of March and ending the last weekend of October and holidays during this same period. Tours may be conducted throughout the week for pre-booked engagements.

C.2.3.21.2 Collect tickets and assist passengers including those with special needs while loading and disembarking.

C.2.3.21.3 Staff an information kiosk to sell tour tickets, greet customers, track sales, and work with tram operator to coordinate tours, visitor needs, and changes.

C.2.3.21.4 Serve as a public relations employee for the USNA to handle visitor concerns and document and inform management. Serve as radio dispatcher for tram, USNA personnel, and

security. Maintain ticket sales, cash drawer balance, and daily deposits which shall be deposited into the facility safe box.

Performance Objective	Threshold
Maintain 100% accuracy of ticket sale revenues from tram operation and deposit cash drawer balance into facility safe box daily.	100% Compliance

C.2.3.22 TRASH REMOVAL SERVICES

C.2.3.22.1 Maintain a facility trash removal system. Provide all service elements designated for the collection and proper disposal of trash and recyclable materials (autoclave trash, compact regular trash, construction trash, incinerator ash, recycle trash, and regular trash). Ensure that the facility has an adequate number of dumpsters and compactors. Provide dedicated and labeled containers to be utilized only for decontaminated autoclave material, incinerator ash, and cardboard recycling. Each dedicated dumpster shall be marked accordingly.

C.2.3.22.2 Maintain a pick-up and delivery schedule for removing trash from the premises. Ensure all trash is disposed of using an EPA approved landfill in accordance with Federal, state, and local regulations and guidelines governing the removal, hauling, and disposal of waste material. Monitor trash receptacles to ensure that no spilled waste is left behind and that no hazardous materials or any other indicated type materials are disposed of in these trash disposal units. The removal of hazardous waste shall remain as an element of the Government and shall not be the responsibility of the SP.

Performance Objective	Threshold
Ensure scheduled pick ups occur.	100% Compliance of pick up within 24 hours of non-compliance. No more than 1 non-compliance quarterly.
Ensure no spillage occurs.	100% Compliance of 48 hours for spillage clean up once non-compliance has been submitted. No more than 1 non-compliance quarterly.
Maintain dumpsters.	100% Compliance of 48 hours for maintenance correction once non-compliance has been submitted

C.2.3.23 VEHICLE / EQUIPMENT MAINTENANCE

C.2.3.23.1 Inspect, maintain, repair, and clean Government-furnished vehicles and equipment including security and mail vehicles and equipment. Conduct safety checks and road-test vehicles to ensure safety and proper operation. Ensure that the engine and other mechanical components are clean to avoid undue stress due to heat. Comply with and perform preventive maintenance on a scheduled basis. Perform associated duties in accordance with Federal, state, and local regulations, guidelines, and permits requirement associated with the operation. Maintain vehicles in accordance with manufacturing requirements and guidelines in order to retain warranty status.

Dispose of all waste oil, antifreeze, and related products in accordance with Federal, state, and local regulations and guidelines.

Performance Objective	Threshold
Ensure that vehicles are properly maintained, repairs are reported to GSA as required, and all maintenance is completed as required. Perform safety checks, road tests, and inspections of vehicles to ensure safe and proper operation.	100% Compliance

C.2.3.23.2 Maintain and submit vehicle reports (ARS 45–Safety Inspection Checklist, annual mileage) and daily activities to ensure a current record of vehicle and equipment condition and maintenance costs.

C.2.3.23.3 Ensure personnel meet requirements and certification as needed to perform their tasks, e.g., Commercial Driver’s License (CDL), air conditioning / Freon certifications.

C.2.3.24 WASTE OIL REMOVAL SERVICES

C.2.3.24.1 Submit a plan for removal of waste oil and by-products for the BA and NAL. The plan shall provide for the proper handling, collection, and storage, and disposal of waste petroleum / oil and related materials, in accordance with Federal regulations for the Management of Used Oil (40 CFR 279) and the Spill Prevention, Control, and Countermeasure (SPCC) (40 CFR 112). Provide for the services described in the approved plan. All collections must be made reliably in accordance with the schedule in the approved plan. Provide all recyclable containers for the collection of oil filters and other parts requiring disposal. Report all spills to the COR immediately after implementing the SPCC. Transfer all waste oil products to an approved recycling facility.

Performance Objective	Threshold
Waste petroleum / oil and by-products shall be collected and recycled and disposed of in accordance with Federal, state, and local requirements.	100% Compliance

C.2.3.25 WILDLIFE MANAGEMENT

C.2.3.25.1 Administer an effective BARC wildlife management program. Conduct predator population monitoring and control. Develop and manage an animal damage control program that minimizes damage to research and forage production from wildlife populations. Remove and properly dispose of injured, ill, or perished animals. Conduct trapping and control program for nuisance wildlife. Submit a MD Big Game Possession Tag to the MD Department of Natural Resources for game taken during administered public hunts. Receive deer donated from Wildlife Management Program; skin and deliver deer to a butcher. Advise employees and scientists on wildlife and wildlife damage control.

C.2.3.26 WORK OPERATIONS SUPPORT

C.2.3.26.1 Organize and operate a work order support element and management system to coordinate services provided under this PWS utilizing the current MAXIMO information database system or a Government approved equivalent system. Maintain an annual customer support plan to provide maintenance service and customer support 24/7 for the SP management system database. Coordinate and manage scheduling and performance of work to minimize the cost to the Government and maximize the efficiency of work performed. Manage work identified by the SP, authorized customers, or the COR. SP-generated work is the result of requests made by operators and maintenance personnel, deficiencies noted during preventive maintenance and other inspections and in the course of work performance and must be pre-approved by the COR or designated representatives except for emergencies. Contact the customer to clarify unclear work request requirements and revise the work request form as necessary. Perform maintenance management as described within applicable laws, regulations, and documents.

C.2.3.26.2 Maintain a 24/7 service response desk to serve as the point of contact for the submission of emergency, urgent and routine service calls. All emergency calls shall be received by SP personnel and not mechanical means. The service call program access list shall consist of required skilled trades personnel who shall report on-site (if during non-business hours) to rectify the occurrence as necessary. Receive, via telephone, radio, fax, in writing, in person, or electronic mail, service order (SO) requests and work order (WO) requests. Coordinate and schedule individual job orders (IJO) work to SP personnel. Be capable of receiving walk-in and telephone requests and be capable to respond to requests for information or project status during normal business hours. Maintain cohesion with research and administrative staff to identify the course of action to be followed in the event of an alarm that occurs in particular research facilities. Informational forms for individual course of actions will be furnished at time of award.

Performance Objective	Threshold
Maintain a 24/7 service response desk to serve as the point of contact for the submission of emergency service calls.	100% Compliance

C.2.3.26.3 Enter emergency WO data into the information database system immediately at receipt. Initiate corrective action to emergency situations within 5 minutes. Emergency service calls involve the correction of conditions that constitute an immediate danger to personnel, threaten property or research, and require action required to restore essential service. The SP shall be at the scene of the emergency with appropriate personnel within one hour after receipt of an emergency service call and shall work continuously until the required service is completed or the condition is arrested.

Performance Objective	Threshold
Initiate notification of emergency situations within 5 minutes. The SP shall be at the scene of the emergency with appropriate personnel within one hour after receipt of an emergency service call and shall work continuously until the required service is completed or the condition is arrested.	100% Compliance

C.2.3.26.4 Enter urgent WO data within 10 minutes of receipt during normal business hours or within 30 minutes on the next business day. Urgent service calls are used when a reported

condition will not immediately endanger personnel or threaten property or research but if not corrected soon could affect research or the health or the well being of personnel. The SP shall respond to the work site within 24 hours and shall complete the task within 5 days after the initial receipt of the service request.

C.2.3.26.5 Enter non-emergency or routine WO data into and distribute the data throughout its work management system within 7 calendar days of receipt. Routine service calls are for work that is not classified as emergency or urgent. Respond to routine work requests the day of work order receipt to analyze, stabilize (if necessary), and determine the state of the project. Completion of project shall be within 30 days of the service request. Larger projects or project issues outside the SP control may extend past the 30 day time period but shall have the written approval from the COR or designated representative. Approval shall at minimal detail reasons for extension and length of extension.

Performance Objective	Threshold
(NAL) Respond to all maintenance and services within 2 hours	95% Compliance

C.3 GOVERNMENT-FURNISHED ITEMS

C.3.1 The Government will provide with no additional cost to the SP the Government furnished items listed in Appendix E1, Facilities; Appendix E2 Equipment; Appendix E3, Vehicles and Heavy Equipment; Appendix E4, Automated Data Processing Equipment (ADPE); Appendix E5, Training. A map depicting the work areas offered to the SP as a physical location to reside while performing required services as well as the identification of work areas where current operations are performed are identified in Appendix C, Maps and Area Layouts. The SP shall ensure neat, sanitary, and serviceable conditions of Government furnished items (work areas, facilities, tools, and equipment) while performing the work prescribed in this PWS.

C.3.2 The SP staff shall operate Government-furnished equipment in a safe and proficient manner. The use of equipment for other purposes separate from this contract is prohibited. The SP shall promote self-maintenance to the maximum extent possible without jeopardizing personnel, animal, and vehicle safety. The SP shall protect equipment with frequent cleaning and use preventative maintenance and minor repairs to minimize breakdowns, depreciation, and the need for costly major repairs. The SP shall communicate with equipment manufacturers and authorized maintenance elements to ensure that equipment is maintained properly and that warranties are valid. The SP shall operate equipment in accordance with appropriate industry practices and techniques. The SP shall provide qualified drivers / operators for the equipment that possesses a state or D.C. operator's license, permits, and the applicable CDL with associated endorsements as appropriate. The SP shall ensure operators are skilled and knowledgeable of the equipment and its safety requirements. The SP shall ensure all vehicles are in compliance with required certifications and inspections, e.g., hydraulic lift inspections for the facility "bucket" trucks, forklifts, hydraulic lift systems, and loading docks.

C.3.3 Government-furnished equipment will not be replaced if it can be repaired or rebuilt to return the equipment to the existing condition at the time of acceptance by the SP. If the repair

estimate is 50% of the replacement cost, the SP shall contact the COR for replacement approval. All maintenance records and documentation providing service history shall be provided to the COR. The SP shall identify all Government-furnished equipment not used or unusable due to normal usage to the Government for disposal instructions. No Government-furnished equipment shall be disposed of without Government consent. All equipment deemed to be an inherent part of a facility in the provision of services, such as air conditioning, will remain with the facility upon completion or termination of the contract and title to the equipment will remain with the Government.

C.3.3 The Government shall provide utilities, fuels, postal distribution, “landline” telephone service, local area network (LAN) services, information technology services, custodial services, security forces, and fire protection at no cost to the SP for performance of the services identified in this PWS as well as access to any applicable databases, information systems and networks.

C.3.4 The use of Government–furnished fuels to transport SP personnel for unauthorized purposes (e.g., lunch, to and from employee residence, etc.) is prohibited. SP shall maintain records of and account for all Government–furnished fuels.

C.3.5 At no time shall the SP salvage any Government property for individual profit or use. Provided items shall remain in the federal system and disposed of or surplus in accordance with Government regulations.

C.4 SERVICE PROVIDER-FURNISHED ITEMS

C.4.1 The SP shall furnish materials and supplies necessary for the performance of the services identified in the PWS, ensuring that environmentally preferable products and services are actively pursued when purchasing.

C.4.2 The SP shall provide service personnel with appropriate uniforms and outerwear (lab coats and coveralls), laundry services, and PPE for use in performing their official duties. Uniforms shall comply with ANSI. These uniforms are necessary for employee identification (colors may be used to further distinguish SP organizations), safety, and appropriate protection. If uniforms are utilized as an identification factor, the employee shall have in his or her possession the authorized photo identification card. The SP shall issue a variety of uniform styles as appropriate to accommodate weather conditions to include but not limited to long and short sleeves, foul weather gear, rain suits and insulated snow suits and hats. A sample of uniforms shall be provided to the COR for approval prior to start date. The SP shall provide a laundering, mending, and altering service for the employees utilizing supplied uniforms. Provide PPE in accordance with OSHA and ANSI related applicable regulations. PPE shall be worn during performance of their duties. PPE shall be dependent on the task that is performed as well as the environment (contaminated or non-contaminated) and shall include but is not limited to clothing, head protection, eye and face protection, foot protection, hand protection, trunk (coats, aprons, pads, and chest plates), ear protection, and respiratory protection.

C.4.3 The SP shall provide facility and equipment maintenance repairs for any repair with a total value under \$5,000 (includes labor, equipment, and materials). The SP shall provide necessary parts and components (filters, light bulbs, batteries, equipment components, and any other item to properly maintain the facilities and equipment) for the performance of services identified in this PWS, ensuring that environmentally preferable products and services are actively pursued when purchasing.

C.4.4 The SP shall provide appropriate costs for obtaining background investigations conducted by the Government. As a minimum all SP personnel shall successfully complete a National Agency Check and Inquiry (NACI). The cost for each NACI is currently \$88.00. In addition, it is likely that personnel performing requirements in C.2.3.14 Locksmithing and C.23.19 Security Systems and Security Equipment Services will undergo Limited Background Investigations, due to being in positions of Public Trust. The government reserves the right to require a higher level of background investigations for any reason on sensitive positions. Personnel working in areas that require access to CFR listed select agents and toxins shall undergo a DOJ / FBI Security Risk Assessment as well as satisfy an OPM background investigation.

C.5 ABBREVIATIONS AND ACRONYMS

Acronym	Definition
24/7	24 Hours a Day, 7 Days a Week, Each Day of the Year
A & E	Architectural and Engineering
ADA	Americans with Disabilities Act
ADPE	Automated Data Processing Equipment
ANRI	Animal and Natural Resource Institute
ANSI	American National Standards Institute
APHIS	Animal and Plant Health Inspection Service
APO	Accountable Property Officer
ARS	Agricultural Research Service
ASHRAE	American Society of Heating, Refrigeration, and Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
AWWA	American Water Works Association
BA	Beltsville Area
BAACUC	Beltsville Area Animal Care and Use Committee
BARC	Beltsville Agricultural Research Center
BAS	Building Automation System
BMP	Best Management Practices
C	Celsius
CADD	Computer-Aided Design and Drafting
CCTV	Closed Circuit Television
CDL	Commercial Driver's License
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFC	Chlorofluorocarbon
CFR	Code of Federal Regulations
CO	Contracting Officer
COR	Contracting Officer's Representative
D.C.	District of Columbia
DDC	Direct Digital Control
DOE	Department of Energy
DOI	Department of Interior
DOJ	Department of Justice
DOS	Department of State
ECM	Energy Conservation Measures
ECMS	Environmental Computer Control and Monitoring System
EMP	Energy Management Program
EO	Executive Order
EPA	Environmental Protection Agency
EPAct	Energy Policy Act
ESPC	Energy Savings Performance Contract
EST/EDT	Eastern Standard Time / Eastern Daylight Time
F	Fahrenheit
FAR	Federal Acquisition Regulation
FAR-B	Friends of the Agricultural Research Center Beltsville
FBI	Federal Bureau of Investigation
FDA	Food and Drug Administration
FEMA	Federal Emergency Management Agency
FPMR	Federal Property Management Regulations
GIS	Geographical Information System

Acronym	Definition
GPM	Gallons per Minute
GSA	General Service Administration
HCFC	Hydrochlorofluorocarbon
HEPA	High Efficiency Particulate Air
HVAC	Heating Ventilation Air Conditioning
IGE	Independent Government Estimate
IJO	Individual Job Order
IPM	Integrated Pest Management
IT	Information Technology
JOTS	Job Order Tracking System
M&V	Measurement and Verification
MDE	Maryland Department of the Environment
M-NCPPC	Maryland - National Capital Park and Planning Commission
MSDS	Material Data Safety Sheet
NACI	National Agency Check with Inquiries
NAFTA	North American Free Trade Agreement
NAL	National Agricultural Library
NASA	National Aeronautics and Space Administration
NCPC	National Capital Planning Commission
NEC	National Electrical Code
NFC	National Finance Center
NFPA	National Fire Protection Agency
NFPC	National Fire Protection Code
NPDES	National Pollutant Discharge Elimination System
NSF	National Sanitation Foundation
OPM	Office of Personnel Management
OSHA	Occupational Safety and Health Administration
PEPCO	Potomac Electric Power Company
PLC	Programmable-logical Controller
PMI	Preventive Maintenance and Inspection
PMIS / PROP	Property Management Information System / Personal Property
PPE	Personal Protection Equipment
PSO	Physical Security Officer
PWS	Performance Work Statement
QCP	Quality Control Plan
RCRA	Resource Conservation and Recovery Act
REE	Research, Education, and Economics
RFI	Request for Information
RO	Reverse Osmosis
SMACNA	Sheet Metal and Air Conditioning National Association
SO	Service Order
SP	Service Provider
SPCC	Spill Prevention, Control, and Countermeasure
UFAS	Uniform Federal Accessibility Standards
UPC	Universal Plumbing Code
U.S.	United States
USDA	United States Department of Agriculture
USGS	United States Geological Survey
USNA	United States National Arboretum
USSS	United States Secret Service
UV	Ultraviolet
WO	Work Order

Acronym	Definition
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

C.6 APPENDICES

APPENDIX A: PUBLICATIONS

PUBLICATIONS INCLUDE ALL DIRECTIVES, REGULATIONS, ETC. REQUIRED BY LAW OR STATUE, PERTAIN DIRECTLY TO SAFETY OF RESOURCES OR PERSONNEL, AND DETAIL MANDATORY PROCESSES.

Title	PWS Reference
Technical Library – CD ROM	Continuous
American Disabilities Act	C.2.2.10.8.5, C.2.3.08.11
American National Standard for Tree Care Operations, A-300 (Part 1) 2001	C.2.2.10.3.2
American National Standard Institute 17.1 and 17.2	C.2.2.02.5, C.2.2.07.1
American Society for Testing and Materials Standards	
American Society of Heating, Refrigeration, & Air Conditioning Engineer Standards	C.2.2.02.5
American Society of Mechanical Engineering's (ASME)	C.2.2.02.5
American Water Works Association, Manual 17 Standard Methods for the Examination of Waste and Wastewater	C.2.2.21..8.2
American Water Works Association Manual 17 Installation, Field Testing, and Maintenance of Fire Hydrants	C.2.2.21.8.2
American Welding Society Structural Welding Code	C.2.2.18
Anacostia Watershed Restoration Agreement	C.2.2.10.5.1
Animal Welfare Act, Title 9, CFR 2000	C.1.2.2, C.2.3.08.12
ARS Manual 130.4, Animal Care and Use Committee	C.1.2.2
ARS Manual 226.1, Control of Property in the Possession of Contractors	C.2.3.08
ARS Manual 230.0, Safety, Health, and Environmental Management Program	C.2.3.18
ARS Manual 2452.1 Chapter 9 part 6 of the Construction Project Design Standard Aug 1991	C.2.2.01.1
ARS Manual 535.1, Humane Animal Care and Use	C.1.2.2
ARS Safety Inspection Checklist	C.2.3.18
BA Master Plan	C.2.3.08.31
BA Policy 01-17, Employee Exit Clearance Procedure	C.1.4.3, C.1.7.5
BA Policy 01-19, Occupant Emergency Plan	
BA Policy 03-03	C.2.3.01.1
BA Policy 03-09	C.2.3.17.9
BARC Catalog of Warehouse and Office Supplies and Government Forms	C.2.3.17
BARC inventory map of road and traffic signs	C.2.3.08
BARC Landscape Committee	C.2.2.10.5.1
BARC Occupant Emergency Plan	
BARC utilities distribution maps	C.2.3.08
Beltsville Area Agriculture Worker Safety Pesticide Usage Policy	C.2.2.10.4.4
Beltsville Area Animal Care and Use Committee	C.1.2.2, C.2.3.05.1
Beltsville Area Animal Care and Use Committee Inspection of Animals Area	C.1.2.2
Boiler and Pressure Vessel Operation Code, ASME	C.2.2.02, C.2.2.19
Building Owners and Mangers of America Standard	C.2.3.08.31
Central Excess Property Operation (CEPO Standards and Procedures)	C.2.3.17

Title	PWS Reference
Chemical Hygiene Plan	C.2.3.18.5
Chesapeake Bay Watershed Agreement	C.1.11.2.1, C.2.2.10.5.1, C.2.3.09.1.4
Clean Air Act of 1990	C.2.3.09.1.1, C.2.3.09.1, C.2.2.02.3, C.2.2.21.1
Clean Water Act/Safe Drinking Water Act	C.2.3.09.1.2, C.2.2.21.1, C.2.3.09.1
Code of Federal Regulations	C.1.7.2
Compost Program	C.2.2.10.9
Comprehensive Environmental Response, Compensation and Liability Act	C.2.2.21.1
Conservation Meadow Program	C.2.2.10.5.1
D.C. Environmental Health Administration	C.2.3.08.11
D.C. Fine Arts Commission	C.2.3.08.11
D.C. Historical Preservation Commission	C.2.3.06.1
D.C. Water and Sewer Authority	C.2.2.21.1
Department of Agriculture Human Resources Management Employee Responsibilities & Conduct Personnel Bulletin 735-1	C.1.4.3
Department of Agriculture – Pesticide Use Control – Pesticide Applicators Law	C.2.2.10.4
Department of Agriculture – Pesticide Use Control – Use and Sale of Pesticides, Certification of Pesticide Applicators and Pest Control Consultants, and Licensing of Pesticide Businesses	C.2.2.10.4
Department of Agriculture – State Chemist – Compost: Registration of Compost and Compost Facility Operator Requirements	C.2.2.10.9
Department of Environment – Air Quality – Control of Incinerators	C.2.3.13
Department of Environment – Sewage Sludge Management	C.2.2.21
Department of Environment – Water Appropriation and Use	C.2.2.21
Department of Natural Resources – Wildlife – General Wildlife Hunting Regulations	C.2.3.25
Department of Natural Resources – Wildlife – Open Seasons, Bag Limits for Game Birds and Game Animals	C.2.3.25
Department of Natural Resources – Wildlife – Threatened and Endangered Species	C.2.3.25
Endangered Species Act of 1973	C.2.3.25
Energy Conservation Program	C.2.3.07
Energy Management Program	C.2.3.07.2, C.1.5.5
Energy Policy Act of 1992	C.2.3.09.1.5, C.2.3.10.5, C.1.11.1.3, C.2.3.08.11
Energy Savings Performance Contract	C.1.11.1.1, C.2.3.07.7, C.2.3.07.8, C.2.3.07.10
Environmental Protection Agency Mandated Laws	Throughout PWS
Environmentally Management System	C.2.3.09.1, C.2.3.09.1.4
Environmentally Preferable Products and Affirmative Procurement Program	C.1.11.3, C.2.3.09.1.5
EPA Material Environmental Regulations	
Executive Order 13101, Through Waste Minimization Recycling and Federal Acquisition	C.1.11.3.2
Executive Order 13123, Greening the Government through Efficient Energy Management	C.2.3.10.5, C.1.11.3.2, C.2.3.07.1
Executive Order 13148, Greening the Government through Leadership in Environmental Management	C.1.11.2.1, C.1.11.3.2

Title	PWS Reference
Executive Order 13148, Leadership in Environmental Management	C.1.11.3.2
Federal Acquisitions Regulations	Throughout PWS
Federal Bio-based Procurement Program Authorized by Section 9002, of Farm Bill 2002	C.1.11.3.2
Federal guidelines and directives for providing steam and chilled water	C.2.2.02, C.2.2.06
Federal Property Management Regulations (Chapter 101)	C.2.3.17.9
Federal specifications to be met by Contractor used materials and equipment	C.2.3.08
Federations of Animal Societies Guide for the Care and use of Agriculture Animals in Agriculture Research and Training	C.1.2.2, C.2.3.08.12
General procedures for working with asbestos	C.2.3.08, C.2.3.18
General Services Administration Rules and Regulations	C.2.3.07.5, C.2.3.17.4
Homeland Security	C.1.7
Indoor Air Quality	C.2.3.18.5
Industrial Hygiene Services	C.2.3.18.5
Institute of Traffic Engineers	C.2.2.20.1
International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air	C.2.3.15, C.2.3.16
International Municipal Signal Association	C.2.2.20.1
Issuing and Controlling ARS Identification Badges	C.2.3.19
Key Card Combination Control Procedures	C.2.3.19.3
Land Use at BARC (1984)	C.2.3.08
Management of Used Oil (40 CFR 279)	C.2.3.24.1
Manual of Uniform Traffic Control Devices for Streets and Highways	C.2.2.20.1
Maryland Department of Agriculture Herbicide Category IIIA to IIIC	C.2.2.10.4.4
Maryland Department of Environment Sediment and Erosion Control Regulations	C.2.2.10.8.6
Maryland Department of Natural Resources	C.2.3.25
Maryland Department of the Environment	Throughout PWS
Maryland High Voltage Act	C.2.2.02.5.1
Maryland Historical Trust	C.1.1.1.1, C.1.1.1.2, C.2.3.06.1, C.2.3.08.5.1, C.2.3.08.11
Maryland Pesticide Application License Category IIIA to IIIC	C.2.2.10.4.4
Maryland State Department of Highway Standards Specification for Construction and Material	C.2.2.10.8.5
Maryland State Highway Administration	C.2.2.20.1
Maryland State Regulations (Title V, Storm water Management Program, Confined Space Program, Lockout/Tagout Program, and Wellhead Protection Program)	C.2.2.21.1
Migratory Bird Treaty Act of 1918	C.2.3.25
NAL Master Plan	C.2.3.08.31
National Aeronautics and Space Administration	C.2.3.08.16, C.2.3.08.10
National Agency Check with Inquires	C.1.7.2
National Capital Planning Commission	C.2.3.08.11, C.1.1.1.1, C.2.3.06.1, C.2.3.08.5.1
National Electrical Code	C.2.2.01.2, C.2.2.05.1, C.2.2.20.1
National Electrical Manufacturers Association Standards	C.2.2.20.1
National Energy Conservation Policy Act, 1978	C.1.11.1.3.

Title	PWS Reference
National Environmental Policy Act	C.2.3.09.1.3, C.2.3.08.11, C.2.3.09.1
National Fire Protection Agency Std. 24 Sec. 7.3.8	C.2.2.01.2, C.2.2.21.8.2, C.2.3.08.11, C.2.2.18.1
National Pollutant Discharge Elimination System	C.2.2.21.1
National Primary and Secondary Ambient Air Quality Standards	C.2.2.21.1
Natural Research Councils Guide and use of Laboratory Animals	C.2.3.08.12, C.1.2.2
NEC Materials Safety Requirements	C.2.2.05
NFPA STD 24, Sec. 7.3.8	C.2.2.21.8.2
Non-Tidal Wetland and Waterway Permit	C.2.2.21.1
North America Free Trade Agreement	C.2.2.05.1
Occupational Medical Surveillance Program	C.2.3.18.5
Office of Personnel Management	C.1.7.2
Oil Operations Permit	C.2.2.21.1
Open Flame	C.2.2.13
OSHA Asbestos Safety Requirements	C.2.3.18
OSHA Equipment Safety Requirements	C.2.3.18
OSHA Materials Safety Requirements	C.2.3.18
OSHA Public Law 91-596, Standard --29 CFR, 1910 + 1926	C.2.3.08.11, C.1.8.3.1, C.2.2.05.1
Personal Property, Motor Vehicle and Aircraft Management Manual 221.1M	C.2.3.17.9
Physical Security; USDA, ARS, BA, NAL worksite Security Policies and Procedures	C.1.7.1
Pollution Prevention Program	C.2.3.09.1, C.2.3.09.1.4
Potomac Electric Power Company Energy Curtailment	C.2.3.07
Preliminary Technical and Economic Analysis	C.1.9.1.3
Preventive Maintenance Program	C.2.2.15.2
Procedures for the Monthly Handling of Petroleum Products	C.2.3.07, C.2.3.10
Programmatic Agreement of the Preservation and Maintenance of NCPC	C.2.3.08.31
Public Building Act - 40 USC 12	C.2.2.01.1
Quality Control Plan	C.1.6.1
REE Signage Policy	C.2.2.17
Resource Conservation and Recovery Act Section 6002	C.1.11.3.2
Respiratory Protection	C.2.3.18.5
Safety Plan	C.1.8.3.2
Security Risk Assessment	C.1.7
Sewage Sludge Utilization Permit – S-02-16-4345-A	C.2.2.21.1
Sheet metal and Air Conditioning Contractors Association (SMACNA)	C.2.2.13.1
Shipping Guidelines; United Parcel Service, Federal Express	C.2.3.15
Shower In / Shower Out Procedure	C.2.2.09.2
Spill Prevention, Control, and Countermeasure Regulation (40 CFR 112)	C.2.3.24.1
State and local codes and regulations for the performance of electrical services	C.2.2.05
State and local codes for refrigeration equipment installation and modification	C.2.2.16
State and local codes governing plumbing and pipefitting	C.2.2.14
Stationary Engineers Operation License	C.2.2.02.2
Technical Provisions for Asbestos Hazard Abatement Work	C.2.3.18
Underwriters Laboratory	C.2.2.20.1

Title	PWS Reference
Uniform Federal Accessibility Standards	C.2.2.10.8.5
Universal Plumbing Code	C.2.2.14.1
Universal Technician Certification for CFC/HCFC for Refrigeration	C.2.2.11.3
U.S. Customs	C.2.3.15.3
U.S. Post Office Mail and Parcel Requirements	C.2.3.15.3
U.S. Secret Services	C.2.3.08.10, C.1.1
U.S. Security Manual	C.1.7
USDA guidelines and directives for providing steam and chilled water	C.2.2.02
USDA Mail Policy	C.2.3.15.3
USNA Campus Pesticide Policy	C.2.2.10.4.4
USNA Traffic and Safety Rules	C.1.1.1.2
Water Appropriation Permit	C.2.2.21
Wetland Clean-Up Program	C.2.3.09

APPENDIX B: WORKLOAD ESTIMATES

WORKLOAD DATA ESTIMATES TO PROVIDE INSIGHT INTO THE AMOUNT OF WORK INCURRED IN THE PAST.

Description of Workload	Quantities or Occurrences	Frequency
<i>C.2.2.01 Alteration and Renovation</i>		
Provide alteration and renovation services for the facility buildings, structures, and fixtures	1356 Service Calls	Annually
Provide masonry and concrete services	45 Service Calls	Annually
Prepare, paint, decorate, and refinish interior and exterior facility surfaces, equipment, furnishings, and utilities	124 Service Calls	Annually
Maintain a Material Safety Data Sheet (MSDS) for paint and other refinishing products	Continuous	Continuous
Install, maintain, repair, and modify roofing systems	148 Service Calls	Annually
Coordinate with proper personnel to ensure items are protected and removed during the task	Each service call	
Ensure gutters, downspouts, and underground rain leaders are free from debris	Continuous	Continuous
<i>C.2.2.02 Central Heating Plant(s) and Heat Distribution Systems</i>		
Maintain and safely operate the central steam production plants, facility heating equipment, and the associated distribution systems to provide uninterrupted steam supply	24/7	
High Pressure Heating Boiler Systems - BARC	9	
Small Heating Boiler Systems - BARC	120	
Elevated Water Towers -BARC	5	
Ground Level Water Storage Tanks - BARC	1	
Underground Level Water Storage Tanks - BARC	2	
High Pressure Boiler Systems - USNA	8	
High Pressure Boiler Systems - NAL	3	
Maintain records and reports required to operate and maintain the central steam production, facility heating, and other designated equipment	All Boilers in use	Daily
Perform regular tests and sample the emissions produced by the boilers	All Boilers in use	Daily
Adjust the boilers to ensure that the plant equipment operates to established standards	All Boilers in use	As Required
Contain the spills, leaks, and breaks as necessary	All Boilers	As Required
Inspect and maintain primary and ancillary equipment and system functions	All Boilers	Monthly
Test combustion control devices, pressure and high limit controls, and over pressure devices	All Boilers in use	Daily
Maintain a boiler water treatment program	All Boilers in use	Daily
Inspect boilers, auxiliary equipment, and steam lines for operation and preventive maintenance purposes	All Boilers in use	Daily

Description of Workload	Quantities or Occurrences	Frequency
Inspect and adjust equipment controls	All Boilers in use	Daily
Check meters, gauges, pressure relief valves, and other instruments and adjust equipment controls	All Boilers in use	Daily
Fire up boilers and secure as required by demand requirements	All Boilers in use	As Required
Perform preventive maintenance and repairs to steam and return system within the main power plants and outlying buildings	All Boilers	Daily
Maintain daily records of temperature readings, feed water temperature, boiler pressures, feed water used, amount of condensate return, water used by plant, and fuel used and quantities that are in reserve	All Boilers in use	Each 8 hours
Maintain written instructions for the operation of steam production plants and heating equipment	Update as Required	
Provide sampling and analysis/test services	All Boilers in use	Each 8 hours
C.2.2.03 Chemical Fume Hoods		
Maintain chemical fume hoods. 95% BARC 3% USNA 2% GD	353 Hoods	
Provide maintenance service for fume hoods	61 Service Calls	Annually
Test facility chemical fume hoods	353 Hoods	Annually
Conduct annual on-site certification / testing for each chemical fume hood	353 Hoods	Annually
Document flow readings, hood functionality, and condition of each fume hood	353 Hoods	Annually
C.2.2.04 Direct Digital Control		
Provide technical expertise and operational support for facilities that have integrated Direct Digital Control (DDC) computer building management systems	38 Service Calls	Annually
DDC Systems - BARC	18 Systems	
DDC Systems - USNA	2 Systems	
DDC Systems - NAL	2 Systems	
Calculate heat loads, humidity and refrigeration requirements. Prepare sketches, circuit diagrams, blueprints, and specifications	6	Annually
Create new DDC Programming	2	Annually
C.2.2.05 Electrical Utilities		
Operate the electricity systems	24/7	
Maintain the electricity systems (includes back-up generation)	2123 Service Calls	Annually
Operate and maintain the electrical back-up generation systems - BARC	55 Gensets	
Operate and maintain the electrical back-up generation systems - NAL	1 Genset	
Service, repair, maintain, and install shop, farm, kitchen, laboratory, and research equipment and appliances	252	Annually
Replace light bulbs	424 Service Calls	Annually
Conduct electrical audits	72	Annually
Layout, repair, and install high voltage distribution lines	100	Annually
High voltage line maintenance and meter reading	1	Daily
Monitor weather to anticipate possible power failure to avoid interruption of facility power	24/7	

Description of Workload	Quantities or Occurrences	Frequency
<i>C.2.2.07 Elevator Service and Maintenance</i>		
Maintain the facility elevators, outside lifts, and book lift systems.	24/7	
BARC (includes 13 exterior lifts / hydraulic lift ramps)	46 Elevators	
USNA	3 Elevators	
NAL	6 Elevators	
Respond to emergency situations	24/7	
<i>C.2.2.08 Fence and Entrance Systems</i>		
Maintain and repair the facility fencing - Refer to Appendix C2 for fence locations	75 Service Calls	Annually
Install facility fences and entrance systems	2	Annually
Maintain and repair the entrance systems	2-5	Weekly
Maintain electronic security gate systems	9 Systems	
Respond to security gate and fence alarm situations	4-6	Weekly
<i>C.2.2.09 Greenhouse Maintenance</i>		
Coordinate with Greenhouse Manager	2	Weekly
Number of greenhouses to maintain	90 Structures	
<i>C.2.2.10 Grounds Maintenance</i>		
<i>Monitor turf growth and schedule mowing operations in order to sustain proper and acceptable height</i>		
BARC Mowing acreage (includes NAL)	490 Acres	
USNA Mowing acreage	20 Acres	
Decontaminate equipment as to not cross-contaminate turf areas and fields/pastures	4	Annually
Fertilize / Apply herbicides and pesticides to turf areas - Post applied areas	2-3	Annually
Fertilize / Apply herbicides and pesticides to plant bedding areas - Post applied areas	2-3	Annually
Maintain the environment surrounding utilities, well heads, equipment and facilities	5	Annually
Remove leaves, litter, trash, and debris (limbs, rocks, etc) from facility property	Continuous	Daily
Chip limbs	As Needed	Daily
Dispose of illegally dumped trash, debris, and waste that may occur on property	10	Annually
<i>Monitor grass growth and schedule trimming and edging operation:</i>		
Trimming - Facility Wide	1	Weekly per cutting season
Edging - Facility Wide	1	Weekly per cutting season
Prune and trim trees, hedges, and shrubs	3	Annually
Remove weeds and vegetation other than designated and planted items from beddings, sidewalks, paths, parking areas, curbs, and roadways	Continuous	Daily during growing season
Control and eradicate parasitic vegetation, weeds, insects, and unwanted pest animals throughout the facility	1	Weekly
Respond to emergency pest situations	26	Annually

Description of Workload	Quantities or Occurrences	Frequency
Maintain an adequate and accurate inventory of chemicals, apparatus, and materials	4	Annually
Procure herbicide and pesticide chemicals to ensure availability	4	Annually
Provide horticultural expertise for designing, implementation, planning, installing, and maintaining the landscape	4-5	Annually
Wildflower and natural environment	13	Annually
<i>Maintain and repair the facilities' ponds, pools, and fountains.</i>		
Number of ponds - BARC	2	
Number of ponds - NAL	1	
Number of ornamental fountains - NAL	1	
Number of ornamental fountains - USNA	2	
Number of decorative pools / fish - USNA	2	
Design, layout, install, operate, repair, and maintain the facilities' automated and non-automated irrigation systems	7	Annually
Update and keep records required for MD and DC water use permits	1	M
Construct and maintain the facilities' flower bed construction	80	Annually
Planting - Annuals - BARC	3	Annually
Mulching - Approx. 3500 cubic yards annually - BARC	2	Annually
Perform landscape construction and maintenance (concrete, flagstone, timber, gravel, trails/walks, patios, and retaining walls)	3	Annually
<i>Spraying</i>	53	Annually
<i>Leaf Removal</i>	101	Annually
<i>Roadside Pick-up</i>	576	Annually
<i>Pick-up Limbs</i>	123	Annually
<i>Stump Grinding</i>	14	Annually
<i>Mowing</i>	410	Annually
<i>Edging</i>	26	Annually
<i>Pruning</i>	57	Annually
<i>Trimming</i>	239	Annually
<i>Irrigation</i>	174	Annually
<i>Tree Work</i>	115	Annually
<i>Wildflower Work</i>	13	Annually
<i>Farmland Maintenance</i>	6	Annually
<i>Area Clean-up</i>	152	Annually
<i>Fence Work</i>	9	Annually
<i>Construction</i>	26	Annually
<i>Blacktop Berm Construction</i>	6	Annually
<i>Miscellaneous Tasks</i>	30	Annually
<i>Signage</i>	90	Annually
<i>Records</i>	45	Annually
<i>Event Set-up</i>	22	Annually
<i>Events (Field Day)</i>	7	Annually
<i>Haul Soil</i>	6	Annually
<i>Flower Bed Construction</i>	80	Annually
<i>Haul Compost</i>	45	Annually

Description of Workload	Quantities or Occurrences	Frequency
Mulching	210	Annually
Plant Beds	602	Annually
Planting	352	Annually
Land Preparation	290	Annually
Fertilize	15	Annually
<i>Remove and properly dispose of trees, stumps, large or excess vegetation</i>		Annually
BARC	14	Annually
USNA	9	Annually
Maintain ditch and drainage areas	4	Annually
Maintain field drains / drain tiles	30	Annually
Provide heavy equipment services in support of facility maintenance and research operations (roadwork, soil stripping, hauling, minor excavation, trenching, backfilling, spreading bituminous concrete)	60	Annually
Deliver raw organic material to the BARC Compost Facility	7000 CY	Annually
Operate the USNA Compost Facility	2	Annually
Wood Chips	40,320 CF	Annually
Leaves	29,800 CF	Annually
Wood (trunks, stumps, limbs)	10,800 CF	Annually
Garden and Research Materials	33,600 CF	Annually
USNA - Haul processed cow manure from BARC to USNA	120 tons	Annually
Environmental clean-up	1	Annually
Area clean-up	Continuous	Daily
Disaster clean-up	1	Annually
C.2.2.11 Heating Ventilation Air Conditioning		
<i>Maintain HVAC Systems</i>		
HVAC Systems - BARC	986 Systems	
HVAC Systems - USNA	14 Systems	
HVAC Systems - NAL	21 Systems	
A/C Emergency Trouble Calls	655	Annually
A/C above 20 tons Service Calls	42	Annually
A/C under 20 tons split Service Calls	622	Annually
A/C window units Service Calls	127	Annually
Frequency Drives Service Calls	3	Annually
Air Compressors Service Calls	55	Annually
Vacuum Pumps Service Calls	19	Annually
Heating System Controls Service Calls	188	Annually
Greenhouse Temperature Controls Service Calls	27	Annually
Exhaust Fan Controls Service Calls	19	Annually
Mobile A/C Units Service Calls	16	Annually
A/C Modifications	42	Annually
New A/C Installations	18	Annually
PM Water Towers	7 Towers	Annually
PM A/C Units	853 Units	Annually
PM Fume Hoods	275 Hoods	Annually
PM Vacuum Hoods	21 V. Hoods	Annually

Description of Workload	Quantities or Occurrences	Frequency
PM Air Compressors	58 Compr.	Annually
PM Pumps	39 Pumps	Annually
A/C Training	10 Sessions	Annually
House Keeping / Restocking	1	Annually
Customer Relations / Communications	5	Daily
Record Upkeep	1	Daily
Parts Procurement	1	Daily
Contractor Coordination	4	Monthly
Blueprint Drafting / Sketch	6	Annually
C.2.2.12 Manure Removal Systems		
Maintain BARC manure removal systems	16 Systems	
C.2.2.13 Metal Fabrication		
Design system, laboratory, and building equipment and fixtures	7	Weekly
Fabricate system, laboratory, and building equipment and fixtures	3	Weekly
Fabricate equipment and vehicle parts and components that are obsolete or are "special" or custom research and laboratory based entities	5	Weekly
Schedule Maintenance	5	Weekly
Shop Work	5	Weekly
C.2.2.14 Plumbing / Pipefitting		
Repair and maintain facility plumbing systems	3110 Service Calls	Annually
Waterline construction	15	Annually
Maintain steam traps	2,080	
Maintain water shut-off valves	10,798	
Replace shut off valves	200	Annually
C.2.2.15 Preventive Maintenance		
Perform preventive maintenance on facilities, vehicles, and equipment (utility and research)	All Necessary Equipment	Per Schedule
C.2.2.16 Refrigeration Systems		
<i>Install and maintain commercial and industrial refrigeration systems and equipment</i>		
Cold Box	1	
Cold Table	1	
Cool Flow Circulator	3	
Culture Chamber	1	
Freeze Drier	4	
Freezer	45	
Growth Chamber	153	
Ice Machine - BARC	25	
Ice Machine - NAL	2	
Incubator	93	
Incubator Shaker	2	
Refrigerated Centrifuge	8	

Description of Workload	Quantities or Occurrences	Frequency
Refrigeration Unit	1	
Refrigerator - BARC	150	
Refrigerator - NAL	12	
Refrigerator / Freezer	32	
Scientific Chiller	7	
Sure Temperature Chamber	4	
Trap Vacuum Refrigerator	1	
Ultra-Low Cooler	105	
Walk-in Cooler	65	
Water Bath	10	
Water Fountains - Drinking - NAL	28	
<i>Maintain Cooling Tower Systems</i>		
Cooling Towers - BARC	11	
Cooling Towers - USNA	1	
Cooling Towers - NAL	1	
<i>Maintain Water Circulating and Chilled Water Closed Systems</i>		
Circulating and Chilled Water Closed Systems - BARC	12	
Circulating and Chilled Water Closed Systems - USNA	1	
Circulating and Chilled Water Closed Systems - NAL	4	
Refrigerators Service Calls	82	Annually
Freezers Service Calls	63	Annually
Growth Chambers Service Calls	101	Annually
Incubators / Germinators Service Calls	51	Annually
Freeze Dryers Service Calls	7	Annually
Ice Machines Service Calls	43	Annually
Milk Tanks Service Calls	3	Annually
CO2 Units Service Calls	8	Annually
Walk-in Freezers Service Calls	30	Annually
Walk-in Coolers Service Calls	110	Annually
Chilled Water Pumps Service Calls	12	Annually
Water Coolers Service Calls	7	Annually
Ultra Low Temperature Boxes Service Calls	19	Annually
Water Towers Service Calls	7	Annually
Recover / reclaim refrigerant on surplus air conditioning, automotive, refrigeration boxes, and window units prior to disposal	58 Service Calls	Annually
C.2.2.17 Signage		
Construct, install and maintain facility signage	90	Annually
Engrave door information and identification labels	100	Annually
Mount labels on stakes	465	Annually
Mount labels on wire	2500	Annually
Mount photo labels on stakes	333	Annually
C.2.2.18 Smoke / Fire Service Maintenance and Detection		
Maintain the smoke alarm, fire alarm, and pressurization systems	120 Service Calls	Annually
Fire Sprinkler Systems - BARC	19	

Description of Workload	Quantities or Occurrences	Frequency
Fire Alarms Systems - BARC	78	
Smoke Detectors - BARC	1640	
Heat Detectors - BARC	150	
Pull Stations - BARC	402	
Horn/Strobe - BARC	280	
Bells - BARC	220	
Flow Switches - BARC	98	
Temper Switches - BARC	57	
Fire Alarm Panels - BARC	60	
Fire Pumps - BARC	5	
Jockey Pumps - BARC	5	
Fire Sprinkler Systems - USNA	2	
Pre-Action Fire Sprinkler System - NAL	5	
Stair Pressurization System - NAL	1	
Conduct annual inspections and testing of each of the facilities' fire sprinkler systems	78	Annually
C.2.2.19 Unfired Pressure Vessels		
Maintain unfired pressure vessels (autoclaves, steam sterilizers, soil sterilizers, Steam Jennys, dishwashers)	140 Service Calls	Annually
Number of Autoclaves - BARC	43	
Number of Sterilizers - BARC	19	
Number of Autoclaves - USNA	2	
Number of Sterilizers - USNA	1	
C.2.2.20 Warning / Traffic Signal Maintenance		
Maintain warning / traffic signals at the intersection of Powder Mill Road and Soil Conservation Road	8 Signal Heads	24/7
C.2.2.21 Water and Wastewater Treatment Systems		
Visit and document each visit at WTP and WWTP	1 Minimum	Ea. 8 hrs
Provide for Permit Renewals for WTP, WWTP, and Sludge	5	Annually
Provide assorted reports	69	Annually
(WTP)		
Operate and maintain the WTP to provide continuous availability of potable water	24/7	
Number of WTP - BARC	1	
Provide Water Report and Operating Report	1	Monthly
Provide Water Withdrawal Report	2	Annually
Perform Backwash Procedures	2	Monthly
Maintain daily consumption of chlorine, chlorine cylinder change, daily chlorine residuals (free and total), pH and iron test results, monthly well capacity, well repairs	Continuous	Daily
Respond to emergencies	24/7	
(WWTP)		
Operate and maintain WWTPs	24/7	
Number of WWTP - BARC	2	
Collect water samples for testing	2	Daily
Provide Wastewater discharge, Monitoring Reports, and Operating Reports	4	Monthly

Description of Workload	Quantities or Occurrences	Frequency
Respond to emergencies <i>(Lift Stations)</i>	24/7	
Operate and maintain lift stations	24/7	
Number of Lift Stations - BARC	7	
Check major lift stations <i>(Reverse Osmosis and Deionization Systems)</i>	2	Ea. 8 hrs
Maintain facility reverse osmosis, deionization, and water purification systems		
Number of systems - BARC	20 Systems	
Number of systems - USNA	1 System	
Number of systems - NAL	5 Systems	
<i>(Fire Hydrants)</i>		
Number of hydrants - BARC	110	
Number of hydrants - USNA	14	
Number of hydrants - NAL	2	
Flush fire hydrants	All Hydrants	Semi Annually
Flow test fire hydrants	All Hydrants	Semi Annually
C.2.2.22 Water Quality Laboratory Services		
Provide sampling and laboratory analytical services	86	Daily
Document laboratory results and conclusions	86	Daily
C.2.3.01 Support Services		
<i>Reports and Submittals</i>		
Time and Attendance Reports	Per Employee	26 Pay periods
Quality Control Evaluation	5-7	Weekly
Job Order Tracking System	3	Weekly
Performance Appraisals / Awards	250	Annually
Personnel Actions	1200	Annually
<i>Communications</i>		
Receive / Answer Telephone Calls	400	Daily
Respond to e-mail	50000	Annually
Mail Distribution for each unit	1-2	Daily
Receive mail from mail contractor, sort, and distribute to required destinations within particular units	1-2 per unit	Daily
Fax Correspondence	57500	Annually
<i>Office Management</i>		
Update and disseminate monthly calendar	7	Daily
Maintain records on correspondence and action items	46	Annually
Maintain bulletin boards	Daily	Annually
Schedule meetings / conference calls or rooms	Daily	Annually
Filing / duplicating	10	Daily
Correspondence management	15	Daily
<i>Travel Training Processing</i>		
Training authorizations	90	Annually

Description of Workload	Quantities or Occurrences	Frequency
Travel Authorizations	15	Annually
Conduct Training	6	Weekly
<i>Budget and Accounting</i>		
Assist in preparing annual budget resource management plan	8-10	Weekly
Acquisition of supplies, equipment, repairs, and services	15-20	Weekly
Tracking unit expenses	258	Weekly
Miscellaneous duties (Field Day, bond drives, etc)	20	Annually
Respond to routine and non-technical requests for information available from files or other public office records	20	Daily
Receive incoming correspondence	8-10	Daily
Review outgoing correspondence for procedural and grammatical accuracy	6-8	Daily
Maintain records on correspondence and action items	175	Annually
<i>C.2.3.02 Auditorium / Conference Room Management</i>		
Coordinate and schedule the general use auditoriums, conference rooms, classrooms, assigned centers, and grounds used for functions and events	10-12	Weekly
Review objectives of events and advises on necessary equipment to accomplish goals	3-4 BARC 4-5 USNA	Weekly
Provide customer assistance and support to employees, customers, guests, and visitors to the concerned facilities. Assist the customer by ensuring needs are met (organizing and preparing, ensuring needed supplies / equipment are available and in working order (flip-charts and markers, projectors, computer access, chairs, tables))	3-4 BARC 4-5 USNA	Weekly
Maintain and manage the audio-visual equipment	3-4	Weekly
Set-up and fine-tunes video equipment and related audio equipment	4	Weekly
Perform minor cleaning, preventive maintenance, troubleshooting, and repairs to equipment	2	Monthly
Deliver, set-up, and operate equipment	4-5	Monthly
Maintain area's video tape library	3	Monthly
Set-up and operate tele/video conferencing	3-5	Monthly
Hang and display exhibits	3	Monthly
Receive and review requests for photocopying and fax equipment	3-4	Monthly
Maintain photocopying and fax equipment supplies of toner and paper	1	Bi-Monthly
Performs routine maintenance functions on photocopying and fax equipment	3-4	Monthly
Operate and adjust satellite dish antennas and equipment	2-3	Monthly
Serve as the primary contact for the installation of indoor and outdoor educational and art exhibits	4	Monthly
Transport and assemble facility exhibits to off-site events	1	Monthly
Support ceremonies and special events (policing grounds, shuttle services, registration, and calculating booth sizes, tables, chairs, and other participant requirements)	29	Annually
<i>C.2.3.03 Building / Facility Oversight</i>		
(USNA & NAL) Oversee and manage services performed at the facilities	7	Monthly
Locate source / vendors to provide maintenance and repairs	3	Weekly
Maintain files / records of action	6	Weekly
Provide space management services, relocation, expansion, and renovation assistance	1	Monthly

Description of Workload	Quantities or Occurrences	Frequency
Perform general duties associated with facility and staff	12	Monthly
Provide for the needs of the staff request (furniture, equipment, etc)	2	Monthly
Perform duties related to control of personnel property	2	Weekly
Administer service contracts (COR)	6	Monthly
Serve as procurement / contract agent including Research information for facility projects	8	Weekly
C.2.3.04 Centralized Facility Monitoring (Building Automation System)		
Maintain an on-site computer-operated building automation system (BAS) centralized station and a building management network for the monitoring of essential building activities and critical equipment	24/7	
Provide first-line response to alarms and emergency calls for service	24/7	
C.2.3.06 Demolition		
Provide demolition services for structures. Reference Appendix F, Demolition Plan, for actual BARC demolition schedule.	Average 19 Structures	Annually
C.2.3.07 Energy Conservation		

Research, evaluate, develop, coordinate, implement, and maintain the facilities energy conservation program in an effort to abide by the Governmental energy conservation requirements and to ensure the most economical energy costs

Ensure that the facilities are in compliance with executive and congressional mandates and other agency directives	Continuous	Daily
Provide technical advice and assistance for energy conservation matters relating to the implementation of energy conservation measures.	Continuous	Daily
Review and update the Energy Management Program (EMP) program annually	1	Annually
Distribute the EMP to departments, institutes, and offices and develop and conduct seminars for facility employees on energy conservation	1	Bi Annually
Maintain energy consumption records and compile reports and graphs to present for system operational efficiency analyses	7	Weekly
Monitor electrical energy consumption	Continuous	Daily
Review correspondence and billing for accuracy and possibilities for load reduction, duty cycling, peak usage reduction, and other Energy Conservation measures	498	Weekly
Serve as the Executive Secretary for the Energy Management Committee and participate in the periodic meetings	1	Monthly
Conduct frequent building and equipment inspections and issue reports on specific findings on inefficient use of energy and recommend corrective action	Continuous	Daily
Promote energy awareness and energy conservation education for facility employees through article publications in the facility newsletter, seminars, and memoranda distribution to employees	12	Monthly
Coordinate with the Department of Energy (DOE), General Services Administration, Commerce Department, Bureau of Standards, Washington Gas Company, and PEPCO, on matters pertaining to energy standards	Continuous	Daily
Research, develop, and implement controls and systems for self-sufficient units	Continuous	Daily
Provide overall coordination, effective implementation, and contract compliance of the ESPC projects	Continuous	Daily
Tabulate statistical data associated with ESPC	Continuous	Daily

Description of Workload	Quantities or Occurrences	Frequency
Ensure that facility components covered by the ESPC meet efficiency codes, standards, and guidelines	1	Daily
<i>ESPC duties:</i>		
Verify contractor's savings Measurement and Verifications (M&V) methods	1	Monthly
Review M&V approach and provide feedback to the COR or designated authority	1	Monthly
Calculate savings and review savings calculations with that of the contract prior to assessing claimed savings	1	Monthly
Monitor and establish baseline equipment and conditions	1	Monthly
Measure and verify risk allocation process	1	Monthly
Balance M&V rigor with project risk	1	Monthly
<i>Evaluate Contractors ECMs in regards to the ESPC:</i>		
Technical feasibility and acceptability	1	Daily
Sound assumptions and engineering principles in energy analysis	Continuous	Daily
Backup documentation on energy and O&M savings	1	Monthly
Acceptable impacts and facilities and operations	1	Annually
Environmental impacts	1	Annually
Reasonable project sites and measures	1	Monthly
Reasonable pre- and post-baseline conditions	1	Annually
Adequate and acceptable performance period M&V approach	1	Annually
Acceptable dispute resolution approach	Occurrence	Occurrence
Responsibility for M&V activities and preparation of analyses and documentation	1	Monthly
Technical risk of project	Occurrence	Occurrence
Hedge or lock for incidental rates	Continuous	Daily
Monthly assessment of the "Annual guaranteed cost proposal"	18	Monthly
Evaluate guaranteed annual cost savings and annual contractor payments, and total price to ensure completeness and appropriate implementation cost	18	Monthly
Conduct dispute resolutions over savings discrepancies	Occurrence	Occurrence
Evaluate utility rebates	1	Monthly
Ensure contract agreements are delivered as proposed	Continuous	Daily
Conduct follow-up monitoring to ensure BARC is obtaining full value from the energy performance contract.	Continuous	Daily
Coordinate inspections to verify that specified equipment has been installed and operating properly	1	Monthly
Document losses and/or savings	1	Monthly
C.2.3.08 Engineering Services		
<i>Provide Engineering Services:</i>		
Civil Engineering	52	Annually
Mechanical Engineering	43	Annually
Electrical Engineering	58	Annually
Structural Engineering	40	Annually
Environmental Engineering	12	Annually
Architectural Services	32	Annually
Maintain official maps, utility maps, and graphical real property facility records	2	Weekly

Description of Workload	Quantities or Occurrences	Frequency
Retrieve database information and produce required database reports, graphical prints, utility site maps, and installation site maps	1	Daily
Modify and update maps and as required create, import, and update graphical facility records using computer-aided design and drafting (CADD)/GIS or a Government-compatible system	3	Monthly
Field-verify installation and utility maps and graphical real property facility record data to ensure accuracy and currency	4	Annually
Verify and update any discrepancies found during the field -verification	4	Annually
Locate underground utilities	4-5	Weekly
Receive from designers and contractors new design drawings, as-built drawings, and file them as a reference and convert non-electronic submitted drawings into an electronic format	2	Monthly
Perform facilities engineering studies and technical consultation	6	Annually
Provide reports in response to Government-approved work requests	3	Monthly
Certify consultations and engineering studies by an applicable Licensed Professional Engineer	2	Annually
<i>Provide Design Services:</i>		
Conduct and submit project planning and design	16	Monthly
Conduct project design development	16	Monthly
Update and maintain project information	1	Weekly
<i>Provide CADD support services:</i>		
Prepare drawings and designs of real property facilities, systems, and equipment	4	Weekly
Review outside prepared drawings and CADD files	2	Monthly
Validate Project Final and As-Built CADD files	6	Annually
Enter drawings revisions into the master drawing file	2	Monthly
Maintain and control CADD files and drawings	18,000 Drawings	
Provide Project Management	180	Annually
Provide Construction Management	180	Annually
Provide Construction Representation	180	Annually
Submit contractual requirements, project funding requirements, and scope of work for A&E service announcement	4	Annually
Develop and submit A&E selection evaluation criteria, and answers to A&E RFI, and recommendations to A&E qualifications and proposals	6	Annually
Participate in progress meetings	1-2	Weekly
Develop and submit Statements of Work, item descriptions, number of units, specifications, independent estimate of Government prices, quantities, and any required standard CADD drawings and details; and project milestones	120	Annually
Participate in pre-award meetings and site visits	170	Annually
Provide contract oversight and inspection (quality assurance) and maintain project construction files with updated project status	120	Annually
Conduct in-process inspections and assist installation representatives and users in documenting deficiencies	120	Annually
Attend final inspection and obtain any user/equipment manuals, receive as-built information, and receive warranty documentation	180	Annually

Description of Workload	Quantities or Occurrences	Frequency
Brief customers and service personnel on warranty coverage for installed equipment	90	Annually
Develop and implement annual work plans	2	Annually
Perform interagency coordination	4	Annually
Attend facilities inspections	1	Quarter
Monitor the completion of work and updates the Animal Care Inspection Report	2	Weekly
Monitor and maintain engineering budget accounts	3-4	Weekly
Develop budget recommendations	2	Monthly
Administer service agreement contracts	2	Monthly
Prepare documentation for contract funding and keep updated files and records pertaining to contractor's performance	2	Monthly
Receive contractor's invoices and review payment request for compliance of the contracted terms	2	Monthly
Maintain required permits associated with the service and maintenance	6	Annually
Perform requirements associated with permit renewal process and participate in the formulation of new permits and subsequent requirements on the facility as a result of these permits	6	Annually
Provide customers with a monthly report	1	Monthly
<i>C.2.3.09 Environmental Protection Programs and Services</i>		
Clean Air Act Oversight and Consultation	12	Annually
Clean Water Act / Safe Drinking Water Act Consultation	12	Annually
National Environmental Policy Act	9	Annually
Environmental Management System, Pollution Prevention Program	10	Annually
Affirmative Procurement Program	30	Annually
Environmental Preferability Program	30	Annually
Recycling Management	50	Annually
Monitor for appearance of pests:		
Scout greenhouse structures	8	Weekly
Scout fields and orchards	1,500	Seasonally
Wildlife control:		
Injured, ill, or perished animal removal and disposal:		
Deer	50 deer	Annually
Smaller Mammals and birds	80 animals	Annually
Trap and harass nuisance wildlife:		
Groundhog	30 traps	Annually
Raccoons	4 traps	Annually
European Starlings	3 traps	Annually
Canadian Geese	Wire grids on 2 large ponds	Annually
Beaver	1 blockage removal	Monthly
Coordinate, conduct, and patrol hunts:		
Conduct weapons qualifications and report qualified individuals	525 qualifications	Annually
Schedule qualifications	600 participants	Annually
Take reservations and check hunters in and out for hunt	3,000	Annually

Description of Workload	Quantities or Occurrences	Frequency
	reservations/v isits	
Process applications to assign hunting areas	300 applications	Annually
Check in hunter harvested deer	350 deer	Annually
Submit DNR possession tags	25 submissions	Annually
Conduct scouting days	150 visits	Annually
Perform boundary maintenance	2,300 acres in 59 areas	Annually
Conduct wildlife and waterfowl census:		
Deer	7 surveys	Annually
Geese	3 surveys	Annually
Waterfowl (other than geese)	5 surveys	Annually
Great blue heron	3 surveys	Annually
Bald eagle	1 nesting location	Weekly
Beaver	1 survey	Monthly
Wildlife observations (nest box checks, vegetation, surveys, banding)	20 nest structures	Annually
Maintain Sustainable Meadows	30 acres	Quarterly
Investigate wildlife damage	2 investigations	Weekly
C.2.3.10 Fuel Management		
Coordinate with local fuel vendors to determine the most efficient fuel source and utility mandate	1	Weekly
Gasoline Usage	97,000 Gal	Annually
Low Sulfur / B20	87,000 Gal	Annually
Fuel Storage Tanks	118 Tanks	
Relay the information to affected utility service plants as to which fuel source to switch to	1	Weekly
Switch utility fuel source as mandated	1	Weekly
Accompany and monitor fuel deliveries	2	Bi Weekly
Maintain and repair the "Gas-boy" fuel dispensing system	2	Bi Monthly
Number of fueling points - BARC	5 Points	
Number of fueling points - NAL	1 Point	
Coordinate tank shutdowns and provide temporary backup	Seasonal	Seasonal
Monitor removal/quantities of contaminated soil, water, fuel, gravel, and tanks	2	Bi Annually
Maintain tank monitoring equipment, tank systems, cathodic protection, and automated monitoring equipment	2	Bi Annually
Research and implement other means and uses of alternative fuels in an effort to reduce dependence on imported petroleum and improve air quality	Continuous	Daily
Issue GASBOY keys / information	5-15	Daily
C.2.3.11 General Support		
Forklift services	6-8	Annually
Driver support for USDA Visitor Center bus	2	Annually

Description of Workload	Quantities or Occurrences	Frequency
Assemble and disassemble furniture	9	Annually
Move and relocate boxes, equipment, and furniture	85% of 2 FTE	Annually
Hang and display exhibits, pictures, and plaques	8	Annually
C.2.3.13 Incinerator / Waste Disposal Systems		
Maintain Incinerator infrastructure system - BARC	2 Incinerators	
Assist and advise incinerator and waste disposal personnel on permits	1	Annually
Oversee the preparation of the Air Emission Report for the disposal process	1	Annually
C.2.3.14 Locksmithing Services		
Provide for locksmith service calls	50	Annually
Respond to emergency locksmith calls	12	Annually
Fabricate keys	1,000	Annually
C.2.3.15 Mail and Information Distribution Service		
Provide mail delivery services (mail, packages, engineering drawings, , plants, and supplies) to and from the USNA and Mail Room, B-003, and B-010A located at the BARC.	1	Daily
Special deliveries/pickups to/from the George Washington Carver facility in Beltsville, MD; APHIS A580, 2 D.C. USDA headquarters buildings, D.C. Commission on Fine Arts, others as required.	3+	Weekly
Coordinate mail and parcels to ensure that methods used comply with the USDA, U.S. Post Office, and U.S. Customs requirements	Each occurrence	Daily
C.2.3.16 Materials Handling / Inventory		
Receive, process, store, and deliver general freight items for the facility and other agencies		Daily
Pick-up goods from local businesses	4	Weekly
Pack, crate, and prepare freight for shipment and arrange for pick-up in		Daily
C.2.3.17 Material and Supply Inventory, Acquisition, and Disposal		
Procure equipment and materials	6	Weekly
Acquire equipment and materials	7	Weekly
Distribute equipment and materials	5	Weekly
Maintain a file for documenting and tracking purchases and equipment acquisitions	14	Weekly
Perform duties related to the identification, reporting, and control of personal property	2	Daily
Maintain documentation files on nonexpendable personal property	1	Monthly
Document the Personal Property Management, inventory reconciliation, employee exit clearance inventories, and suspense report reconciliation	20	Monthly
Document acquisition, reallocation, and disposal of excess personal property	35	Annually
Maintain a special inventory list	1	Monthly
Assist in annual inventory	1	Monthly
Conduct annual physical inventory	1	Annually
Initiate the inventory and walk through the services organization / laboratory with the APO or designee while the physical inventory is being conducted	46	Annually
Work with the APO to reconcile inventory and follow up as necessary	46	Annually

Description of Workload	Quantities or Occurrences	Frequency
Work with APO, research laboratories, and maintenance facilities in matters relating to acquisition and disposal of excess and surplus property, and the reporting of lost, damaged, or destroyed property		Daily
Visit laboratories, offices, and work sites to assist in determining the most economical means to meet the requirements and to inspect and survey excess property	3	Weekly
Contact and visit General Service Administration (GSA), APO's and other supply sources periodically to determine availability of excess and surplus property	1	Weekly
Advise requesters of excess property or surplus availability		Daily
Screen excess property documents received to determine the appropriate action to take on the disposition of excess / surplus property		Daily
Coordinate the removal or transfer of excess property	3	Weekly
Notify certified technicians to remove Freon from unserviceable refrigeration equipment prior to disposition	20	Monthly
Provide requesters appropriate forms in matters regarding acquisition, disposition, and transfer of nonexpendable personal property		Daily
Maintain the scrap yard		Dependent on inventory
Contact designated GSA to dispose of scrap material	1	Monthly
Make determination as to whether items have scrap value or should be disposed of in dumpsters		Daily
Gather and compile data from property transactions processed during the month to contribute to the Area Property monthly Activity Report		Daily
Utilize the current PMIS / PROP database system to manage facility		Daily
Review request for changes, additions, or deletions to the telephone systems	34	Annually
Provide support to the ARS Tort Claims / Property Damage Program	30-35	Annually
C.2.3.18 Safety, Occupational Health and Environmental Services		
Provide training:		
<i>Pesticide Training</i>		
State Pesticide Applicators Certification	1	Annually
Worker Protection Standard	1	Monthly
Chemical Hygiene Training	1	Monthly
Hearing Conservation Training	2	Annually
Respiratory Protection Training	92	Annually
Hazard Communication Training	2	Annually
Control of Hazardous Energy		As Needed
Confined Space Entry	4	Annually
New Employee Orientation	12	Monthly
OSHA Thirty-hour Collateral Duty Safety Officer Training	1	Annually
Safety Committee Training	1	Annually
Safety Publications	4	Annually
Supervisor Training to satisfy OSHA Basic Program elements	1	Annually
"Toolbox Talks" on specific topics upon shop request	4	As Needed
Other training as mandated by regulations and as necessary based on current trends	4	Annually
Make presentations at Agency Safety and Health Conferences	1	Bi-Annual

Description of Workload	Quantities or Occurrences	Frequency
Manage Safety Library	25	Annually
<i>Provide advice, guidance, and inspection services to facility and Governmental departments, organizations, and agencies:</i>		
Construction and Engineering	100	As Needed
Pesticide Safety (Agricultural Chemical)	2	Monthly
Chemical Hygiene Plan	36	Annually
Hearing Conservation	36	Monthly
Noise surveys	9	Annually
Noise Hazard Areas	35	
Industrial Hygiene Services	50	Annually
Indoor Air Quality	10	Annually
Respiratory Protection	40	Annually
Respirator Fit Testing	100	Annually
Occupational Medical Surveillance Program	20	Monthly
Accident/Incident Investigation and Reporting	5	Annually
Ergonomic Consultation	12	Annually
Fall Protection Advice	3	Monthly
Hazard Communication	3	Monthly
Control of Hazardous Energy	1	Monthly
Confined Space Entry	25	Annually
Pits / Tanks / Silos / Grain Bins	105	
Utility vaults, utility holes, tunnels	691	
Alternative Procedures – Catch basins - (OSHA 1910.146 (c) (5))	66	
Personal Protective Equipment	5	Annually
Safety Awards	9	Annually
Area Safety Committee	6	Bi-Monthly
Safety Inspections	80	Annually
Responding to Unsafe and Unhealthful Working Conditions	1	Daily
BAACUC Protocol Review	100	Annually
BAACUC Inspection of animal areas	4	Annually
Clean Air Act Oversight and Consultation	12	Annually
Clean Water Act / Safe Drinking Water Act Consultation	12	Annually
National Environmental Policy Act	9	Annually
Environmental Management System, Pollution Prevention Program	10	Annually
Affirmative Procurement Program	30	Annually
Environmental Preferability Program	30	Annually
Recycling Management	50	Annually
Generate letters, memoranda, safety procedures, special reports, training forms, procurement requests, personnel actions, and other related services in support of the Area Safety and Health Manager's tasks	6	Daily
C.2.3.19 Security System and Security Equipment Services		
Assist the BA PSO in coordination of physical security surveys and threat assessment evaluations	1-3	Monthly
Assist the BA PSO in education and briefing of government personnel and contractor employees on security systems and equipment	1	Monthly

Description of Workload	Quantities or Occurrences	Frequency
Recommend physical security components and cost-effective solutions to existing or future physical security system design or components	1	Monthly
<i>Install, maintain, troubleshoot, diagnose, and repair the facilities' security equipment systems:</i>		
Access control systems	43 Systems	
Intrusion detection systems	76 Systems	
Video intercoms	12 Intercoms	
Electronically-controlled gates	7 Systems	
Assist the PSO with all new construction and renovation design of physical security systems from the inception of the project	2	Monthly
Perform regular audits of all security systems	1	Annually
Generate usage reports	1	Annually
Maintain a preventive maintenance program	2	Weekly
Issue security / access codes	3	Monthly
Manage security code system records and usage	3	Monthly
Program and issue security proximity entrance cards	30	Weekly
Reissue new cards in the event cards are lost or damaged	2	Weekly
Run security code and electronic card access usage reports	2	Monthly
Issue visitor passes - visitors, contractors, parcel deliveries (BARC)	15	Daily
Issue temporary vehicle permits and parking passes (BARC)	8	Daily
C.2.3.20 Snow Removal / Site Preparation		
Perform snow removal	24/7 during winter season	
Miles of roadway - BARC / NAL	60	
Acreage of parking lots - BARC / NAL	20	
Miles of roadway - USNA	9.5	
Acreage of parking lots - USNA	22	
Miles of roadway - FDA	4	
Acreage of parking lots - FDA	2.5	
Miles of roadway - USSS	7.5	
Acreage of parking lots - USSS	15	
Monitor weather conditions to predict and prepare for winter storms	24/7 during winter season	
Maintain snow removal equipment	24/7 during winter season	
C.2.3.21 TRAM Operation - USNA		
Number of weekend tours during season	7 tours	Daily - Weekends and Holidays
Number of weekday tours	55 tours	Annually
April - May (Monthly average breakdown of 55 total)	10-20	Monthly
June - August (Monthly average breakdown of 55 total)	5 - 10	Monthly
September - October (Monthly average breakdown of 55 total)	4-5	Monthly
Number of tickets sold for tram tour for Weekends and Holiday Tours	3940	Annually
C.2.3.22 Trash Removal Services		
Number of dumpsters (3, 4, 6, 8, and 30 cubic yards)	93	
Decontaminated Autoclave Material containers - 6 cubic yards	5	

Description of Workload	Quantities or Occurrences	Frequency
Incinerator Ash containers - 2 cubic yards	2	
Cardboard Recycling containers - 6 cubic yards	2	
NAL Compactor - 20 cubic yards	1	
C.2.3.23 Vehicle Maintenance		
Inspect, maintain, and repair Government-furnished vehicles equipment	700 BARC 40 NAL	Annually
Security Vehicles	11	
Mail Vehicles	4	
Vehicle Maintenance Service Calls	255	Annually
Transport Gov leased vehicles for repair / maintenance service	3	Annually
Report mileage and request for repairs to GSA	1	Monthly
C.2.3.24 Waste Oil Removal Services		
Monitor waste oil tanks and all facilities' tanks to assess need for removal or products.	7	Annually
Coordinate removal of waste oil, filters, mixed waste oil, etc	7	Annually
Repair and maintain waste oil tanks	1	Annually
Waste Oil Tank	5 @ 500 Gallons each	
C.2.3.25 Wildlife Management		
Farmers and Hunters Feeding the Hungry Program, Skinning and Delivery	90 deer, 4,000 lbs of edible meat	Annually
Committee Support and Perform Special Assignments	5	Weekly
BARC Ecology Committee	2 meetings	Annually
Firearm Policy Coordinator	30 Employee owned guns and bows checked / stored	Annually
MD Dept of Natural Resources and U.S. Fish and Wildlife Service designated agents	12 permit or reports	Weekly
Permit Application input	5 requests	Annually
MD State Shooter Qualification Committee	1 formal and 5 informal meetings	Annually
C.2.3.26 Work Operations Support		
Receive, analyze, and process service request	11051	Annually
Preventive Maintenance tickets (of service request)	3000	Annually
Reimbursable Tickets (of service request)	1287	Annually
Contact the customer to clarify unclear work request requirements and revise the work request form	4-5	Weekly
Enter and initiate emergency work orders	214	Annually

APPENDIX C: MAPS AND AREA LAYOUT

APPENDIX C1: MAPS AND AREA LAYOUT

REFER TO THE TECHNICAL LIBRARY (CD ROM) TO VIEW ACTUAL MAPS OF THE WORK AREAS WHICH ARE OFFERED TO THE SERVICE PROVIDER AS A PHYSICAL WORK LOCATION.

APPENDIX C2: WORK AREA AND FACILITIES TO BE MAINTAINED

WORK FACILITIES / AREAS TO BE MAINTAINED BY SP

Building #	Description	Est. Sq. Ft.
Beltsville Agricultural Research Center		
B01	North Drive Road Bridge	60 ft
B02	South Farm Road Bridge	60 ft
B03	Research Road Bridge	60 ft
B04	Powder Mill Road Bridge	60 ft
N015	West Waste Water Plant	5,000
001	Office / Laboratory	52,580
001	Chain Link Fence (APHIS)	1 fence
002	Office / Laboratory	34,080
002	Board and Batten Fence	225 linft
002A	WITS	593
003	Administration	113,199
003	Sewage Decontamination	108
004	Office / Laboratory	31,648
004	Trickle Irrigation System	9,000 linft
005	Office	52,580
006	Office / Laboratory	24,562
007	Office / Laboratory	53,350
008	Laboratory / Greenhouse	13,047
008	Spray Risers	1,000 ft
008A	Walk-In-Box	64
008C	Walk-In-Box	64
009	Range 3	61,731
009	Chain Link Fence	1 fence
009AA	Office / Laboratory	5,384
009C	Greenhouse	138
009E	Greenhouse	138
009F	Greenhouse	138
009G	Greenhouse	140
009H	Greenhouse	140
009J	Greenhouse	140
009L	Greenhouse	140
009M	Greenhouse	147

Building #	Description	Est. Sq. Ft.
009N	Greenhouse	165
009P	Laboratory	663
009Q	Pesticide Storage	226
010	Range 2	99,311
010	Chain Link Fence	1 fence
010A	Plant Science	68,000
010B	Controlled Environmental	17,612
010C	Walk-In-Box	213
010D	Walk-In-Box	64
011	Range 1	144,283
011A	Bioscience	83,045
011B	Walk-In-Box	96
011D	Inactive Growth Chamber	133
011G	Storage	38
011H	Storage Building	44
011I	Storage Building	135
011J	Pesticide Storage	80
011K	Storage	91
012	Service Building	33,530
013	Shop	7,484
013A	Garage	480
014	Heating Plant	6360
014A	Oil Tank	50,000 gal
014B	Oil Tank	50,000 gal
014C	Oil Tank	50,000 gal
014CC	Transformer	120
014E	Sub-Station	539
014F	Water Tank	28,000 gal
016	Residence	1456
017	Child Care Center	1,750
017	Above-Ground Storage Tank	275 gal
018	Residence	2,304
019	Pump Station	240
019A	Pumphouse	548
019B	Final Chlorine	72
022	Residence	1,034
023	Residence	5,148
023	Above-Ground Storage Tank	275 gal
023A	Garage	320
023B	Shed	240
024	Storage	1,552
024A	Storage	1,008
025	Storage	1,544
026	Garage	776
027-1	Underground Storage Tank	4,000 gal
027-2	Underground Storage Tank	4,000 gal
028A	Storage Building	2,800

Building #	Description	Est. Sq. Ft.
028B	Shed	100
029	Service	22,136
029A	Storage	7,678
029A	Above-Ground Storage Tank	2,000 gal
030	Office	1,225
030	Above-Ground Storage Tank	275 gal
030A	Transformer	192
031	Barn	600
032	Service	864
033	Shed	1,927
033A	Hazardous Waste Storage	177
033B	Radiation Waste Storage	121
033C	Farm Vehicle Wash-down	600
033D	Pesticide Storage	188
033E	Pesticide Storage	188
034	Equipment Shed	3,060
035	Storage	1,105
036	Storage	800
037	Garage / Shed	4,808
038	Storage	1,079
039	Storage	1,040
040	Storage	1,040
041	Solvent Storage	796
041A	Storage	189
042	Reservoir Station	150,000 gal
44	Laboratory	3,400
044A	Quonset Hut	512
044C	Quonset Hut	512
044D	Quonset Hut	512
045	Transformer	16
046	Office	3,292
046A	Office	1,728
046AA	Sidewalk	128
047	Office / Laboratory	2,444
047A	Office / Laboratory	2,240
047B	Inactive Walk-In-Box	518
048	Office / Laboratory	1,600
048A	Screen House	616
048B	Chemical Storage Shed	139
049	Office / Laboratory	1,564
049B	Storage Shed	1,564
050	Range 4	41,173
052	System Research Field Laboratory	2,880
052	Chain Link Fence	180 linft
053	Biological Greenhouse	3,634
053	Security Fence	1 fence
055	Residence	1,680

Building #	Description	Est. Sq. Ft.
055A	Shed	192
057	Pumping Station	120
057A	Piping Shelter	72
057B	Pump House	100
058C	Paint Branch Dam	1 dam
060	Service	24,561
062	Garage	1,500
085	Granary	7,000
085A	Heating Plant	1,200
085B	Garage	1,000
085C	Storage Shed	1,300
085-1	Underground Storage Tank	1,000 gal
086	Stone Yard	2,200 tons
090	Transformer	120
156	Office	930
157	Office / Laboratory	13,324
157A	Well	1,000 ft
158	Transformer	256
161	Office / Laboratory	21,780
161A	Laboratory	280
161-1	Underground Storage Tank	4,000 gal
162	Office / Laboratory	9,374
162A	Storage	100
163	Barn	6,120
163F	Fort Hooven	19,296
163G	Scale House	80
165	Heating Plant	1,536
165	Underground Storage Tank	20,000 gal
166	Underground Storage Tank	2,500 gal
166A	Shed	400
166D	Harvestore Silo	228 cuyd
166E	Harvestore Silo	228 cuyd
166F	Harvestore Silo	228 cuyd
166G	Harvestore Silo	228 cuyd
166H	Barn	2,400
166P	Animal	151
167	Barn	17,800
169	Scale House	388
170	Barn	20,371
171C	Large Bunker Silo	3,000
171D	Bunker Silo	3,000
172	Barn	3,160
173	Office / Laboratory	12,289
175	Storage	420
176	Shed	80
177	Office / Laboratory	3,460
177A	Office / Laboratory	2,510

Building #	Description	Est. Sq. Ft.
177B	Office / Laboratory	4,322
177C	Office / Laboratory	4,560
178	Garage	2,278
178-1	Milking Parlor	3,059
178-2	Free Stall Barn (was 178D)	29,921
182	Feed Center	8,419
182	Transformer	144
183	Storage	8,978
184	Anaerobic Digester	1,184
186	Security Headquarter	5,210
191A	Storage	240
192-1	Storage	648
192G	Scale House	260
192J	North Farm Bunker Silo	2,222
192K	Animal Shelter	2,497
192L	Animal Shelter	2,497
194	Sewage Pumping Station	144
200	Office / Laboratory	52,000
200A	Water Pumping Station	100
201	Meat Science Laboratory	15,580
201A	Walk-In-Box	144
201B	Walk-In-Box	238
201C	Walk-In-Box	238
201D	Walk-In-Box	196
202	Heating Plant	3448
202	Underground Storage Tank	20,000 gal
203	Barn	38,769
203A	Animal Shelter	3,072
203B	Animal Shelter	1,536
203C	Sheep Reproduction Facility	23,646
203D	Boar House	2,220
203E	West Bunker Silo	960
203F	East Bunker Silo	960
203G	Walk-In-Box	168
203H	Shed	376
204	Abattoir	13,970
204A	Laboratory	341
204B	Poultry House	4000
204C	Propane Gas Compound	1 gas cmp
205	Barn	2,620
208	Barn	4,584
208	Underground Storage Tank	500 gal
208C	Hog Shed	24
209	Walnut Grange Service Center	6,650
209B	Storage Shed	64
211	Office / Laboratory	5,878
211A	Storage Shed	282

Building #	Description	Est. Sq. Ft.
215A	Animal Shed	2,048
215B	Sheep Barn	1,536
215C	Sheep Barn	1,536
215D	Tile Silo	168 cuyd
215E	Bunker	1,215
215F	Corn Crib	1,215
216	Residence	3,996
216A	Garage	324
218B	Sewage Pumping Station	278
218D	Spray Field Pumphouse	548
218G	Office Building	1,469
218H	Mechanical Screen Building	686
218I	Chemical Building	530
218J	Operations Building	998
218K	Lagoon	620,000 gal
218L	Lagoon	620,000 gal
218M	Lagoon	620,000 gal
218N	Tank	56,540 gal
218O	Tank	56,540 gal
218P	Office Trailer	360
218Q	Pole Shed	2,560
222	Transformer	60
223	Office	696
223	Above-Ground Storage Tank	275 gal
224	Barn	18,860
224A	Bunker Silo	1,400
224B	Bunker Silo	1,400
224C	Bunker Silo	1,400
230	Animal Biotech Facility	12,140
236	Hay House	4,550
237	Poultry House	1,965
238	Poultry House	1,965
239	Poultry House	1,965
240	Water Pumping Station	117
244	Pumping Station	110
244A	Deep Well	1,000 ft
246	Radioactive Waste Storage	910
252	Storage	3,023
253A	Residence	1,680
253B	Shed	192
254	Poultry House	18,160
255A	Drainage System	1 system
255A	Chicken House	3,800
255D	Transformer	64
261	Heating Plant	1,963
261A	Transformer	200
262	Office / Laboratory	10,420

Building #	Description	Est. Sq. Ft.
263	Office / Laboratory	8,600
264	Office / Laboratory	8,250
264A	Transformer	144
264B	Shed	192
264C	Physiology Cage House	2,880
265	Office / Laboratory	8,600
267	Poultry House	5,290
270	Poultry House	1,050
271	Poultry House	1,341
273	Poultry House	1,341
274	Poultry Facility	890
275	Turkey Barn	890
277	Turkey Barn	890
278	Poultry House	1,250
281	Residence	4,000
281	Above-Ground Storage Tank	500 gal
286	Water Tank	100,000 gal
287	Water Pump House	172
287A	Well	1,000 ft
288	Office / Laboratory	2,730
288A	Office / Laboratory	892
289	Storage	1,730
300	Pumping Station	100
301	Farm Service	3,420
301B	Equipment Maintenance Shop	1,877
301C	Garage	4,025
301D	Garage	3,904
301D	Underground Storage Tank	4,000 gal
301D-1	Underground Storage Tank	4,000 gal
301E	Garage	4,032
301F	Farm Vehicle Wash-down Facility	530
301H	Maintenance Shop	4,128
302	Visitor Center	3,600
302A	Log Lodge	617
303	Office / Laboratory	9,560
303A	Garage	4944
303B	Transformer	150
304	Sewage Pumping Station	100
305	Pump Station	100
306	Office / Laboratory	63,400
306A	Solvent Storage Building	192
307	Center Laboratory	67,120
307A	Shed	79
307B	Office/Laboratory	47,543
307C	Office/Laboratory	44,718
S-307	Transformer	3,000
308	Office / Laboratory	67,500

Building #	Description	Est. Sq. Ft.
S-308	Transformer	3,000
308A	Walk-In-Box	98
308A	Water Tower	250,000 gal
308C	Small Animal Facility	3,821
308D	Shed	288
309	Office / Laboratory	27,740
S-309	Transformer	3,000
309A	Main Transformer at Sub Station	3,000
309B	Oil Tank	20,000 gal
309C	Oil Tank	20,000 gal
310	Water Treatment	2,800
312	Storage	3,160
312A	Hazardous Waste Marshalling	172
312B	Radiation Waste Marshalling	121
313	Pumping Station	246
313A	Well	1,000 ft
314	Pumping Station	100
315	Solvents Building	906
316	Water Tank	100,000 gal
318	Office / Laboratory	21,300
318M	Chemical Storage Building	34
319	Office / Laboratory	6,430
320	Office / Laboratory	5,840
320A	Heating Plant	160
321	Office / Laboratory	6,080
321A	Walk-In-Box	156
321B	Walk-In-Box	156
322	Office	7,200
323	Barn	675
324	Office / Laboratory	4,225
324A	Office / Laboratory	551
324B	Walk-In-Box	240
325D	Animal	210
327	Laboratory	1,980
327A	Small Chicken	329
328	Laboratory	1,290
333	Office / Laboratory	412
334	Laboratory	4,600
335	Poultry House	2,604
335A	Storage	200
335B	Storage	1,320
336B	Animal Shed	130
336C	Animal Shed	130
337	Laboratory	971
337A	Swine Research Building	2,048
337B	Storage	124
338	Office / Laboratory	2,080

Building #	Description	Est. Sq. Ft.
338A	Laboratory / Storage	1,316
338B	Animal Building	1,759
339C	Animal Shed	150
339D	Animal Research Building	5,766
339F	Laboratory	2,368
340	Barn	3,765
341R	Hog Shed	95
342	Animal Shed	95
342A	Hog Shed	175
342B	Hog Shed	175
342C	Hog Shed	175
342D	Hog Shed	175
344	Barn	2,484
357	Laboratory	1,108
357A	Office	605
362	Storage	213
363	Storage	213
364	Storage	205
369	Storage	326
370	Office	306
371	Office	306
372	Office	306
373	Office	306
374	Storage	210
375	Storage	210
376	Storage	210
377	Storage	170
378	Storage	130
379	Animal Shed	130
380	Animal Shed	130
385	Pole Shed	680
385A	Storage Shed	288
391	Animal Shed	206
392-1	Poultry House	100
392A	Poultry House	100
392B	Poultry House	100
392C	Poultry House	100
392D	Poultry House	100
392E	Poultry House	100
392F	Poultry House	100
392G	Poultry House	100
405	Heating Plant	519
413A	Transformer	238
419	Office - Trailer	3,950
419	Above-Ground Storage Tank	1,000 gal
421	Storage	9,000
422A	Transformer	238

Building #	Description	Est. Sq. Ft.
426	Office / Shop	21,860
426A	Office Building	3,005
427	Storage	9,280
429	Storage	6,096
430	Shop	3,471
431	Shop	2,200
432	Sheep Barn	8,090
433	Implement Shed	2,880
434	Barn	3,770
435	Animal Shed	456
435A	Sheep Shed	525
436A	Trailer	167
445	Garage	8610
445A	Loading Ramp	1 loading ramp
446	Shop / Storage	8,100
446	Underground Storage Tank	2,000 gal
446A	Fuel Tanks & Pumps	1,000 gal
447	Gasoline Station	260
447	Underground Storage Tank	550 gal
447-1	Underground Storage Tank	10,000 gal
448	Storage	2,500
449	Storage	5,596
450	Storage	4,486
452	Shed	120
453	Water Tower	250,000 gal
454	Garage	18,754
465	Laboratory / Greenhouse	5,404
465	Above-Ground Storage Tank	1,000 gal
467	Office / Laboratory	15,282
468	Laboratory	960
469-1	Laboratory	790
470	Laboratory w/Greenhouse	15,730
470A	Laboratory w/Greenhouse	7,167
470AA	Greenhouse	200
470B	Laboratory	2,141
470BB	Greenhouse	156
470C	Soil Storage	412
470CC	Greenhouse	156
470DD	Greenhouse	156
470EE	Greenhouse	156
470FF	Greenhouse	156
470GG	Greenhouse	156
470HH	Greenhouse	156
470II	Greenhouse	156
470JJ	Greenhouse	156
471	Garage	756
471A	Storage Shed	132

Building #	Description	Est. Sq. Ft.
472	Shed	1,360
473	Inactive Growth Chamber	992
474	Growth Chamber	1,006
475	Laboratory	646
476	Office / Laboratory	18,040
483	Bee Laboratory	800
484-1	Storage	1,440
484A	Bee House	212
485	Shed	72
487	Storage	314
488	Walk-In-Box	98
489	Transformer	238
504E	Storage	300
506A	Garage	1,570
513	Residence	1,845
513	Above-Ground Storage Tank	275 gal
513A	Garage - Residence	996
519	Animal Shed	3,600
524	Gasoline Station	345
527	Bull Barn	6,320
531	Residence	4,080
531B	Shed	100
535	Hog House	192
535A	Hog House	192
535B	Hog House	192
535C	Hog House	192
535D	Hog House	192
535E	Hog House	192
535F	Hog House	192
535G	Hog House	192
536	Swine Barn	10,560
537	Animal House	9,352
538-1	Metal Shed	1,536
539	Feed Barn	1,716
540	Feed Barn	5,888
541	Hog House	197
541A	Hog House	197
541B	Hog House	197
541C	Hog House	197
541D	Hog House	197
541I	Hog House	197
543	Animal Laboratory	5,045
543A	Animal Shed	500
554	Hog Shed	320
555	Hog Shed	320
580	APHIS Area Screen houses 1-7	7,000
580	Greenhouse Sections A, C, E, F, G, H	7,200

Building #	Description	Est. Sq. Ft.
580	Quarantine Orchards	10 Acres
603	Water Tank	50,000 gal
606	Hanger	5,261
673	Trailer	672
674	Pesticide Storage	1,440
674A	Pesticide Center	288
675	Shop/Equipment Storage	4,000
676	Equipment Storage	2,880
677	Seed / Fertilizer Storage	3,200
678	Silo Control Building	384
678A	Grain Bin	6,300 bu
678B	Grain Bin	9,900 bu
678C	Grain Bin	8,100 bu
678D	Grain Bin	13,500 bu
678E	Grain Bin	3,600 bu
678F	Grain Bin	8,100 bu
679	Residence Equip Storage	4,500
680	Equipment Shed	1,152
1000	Gate	50
1001	Office / Laboratory	1,680
1002	Office / Laboratory	1,664
1003	Animal Shed	2,156
1004	Storage	1,900
1005	Barn	1,900
1006	Barn	1,900
1007	Storage	500
1008	Sewage Pumping Stat	108
1017	Animal House	384
1018	Animal House	384
1019	Animal House	640
1020	Shop	580
1030	Animal Shed	424
1040	Office / Laboratory	15,421
1041	Laboratory	1,300
1042	Laboratory	2,350
1043	Laboratory	6,250
1044	Laboratory	5,690
1045	Laboratory	2,600
1046	Storage	100
1047	Transformer	480
1048	Cart Shelter	1,248
1050	Office	1,583
1051	Storage	3,750
1052	Storage	420
1053	Storage	364
1054	Storage	70
1062	Animal Barn	2,625

Building #	Description	Est. Sq. Ft.
1063	Animal Barn	2,625
1064	Animal Barn	2,625
1065	Animal Barn	2,625
1070	Office	4,921
1071	Garage	306
1072	Office	3,276
1073	Garage	180
1074	Animal Pen	369
1075	Animal Pen	369
1076	Animal Pen	369
1077	Animal Pen	369
1080	Animal Experiment Building	1,080
1081	Animal House	1,080
1082	Animal House	1,080
1083	Animal House	1,080
1090	Animal Shed	424
1091	Animal Shed	424
1092	Animal Observation Building	28
1094	Animal Shed	424
1095	Animal Shed	424
1100	Office / Laboratory	3,290
1104	Storage	396
1106	Water Tank	100,000 gal
1120	Office / Laboratory	2,625
1122	Storage	2,700
1124	Storage	4,000
1125	Storage	4,000
1126	Animal Laboratory Building	4,850
1126A	Storage Building	360
1140	Animal Barn	2,625
1143	Animal Building	637
1144	Animal Building	637
1145	Animal Building	637
1146	Animal Building	637
1160	Animal Barn	4,816
1161	Scale House	350
1168	Water Pumping Station	77
1180	Office / Laboratory	3,984
1181	Animal Barn	2,625
1182	Animal Barn	2,625
1183	Water Pumping Station	221
1190	Foreman's Headquarters	5,342
1190	Above-Ground Storage Tank	2,000 gal
1190-1	Above-Ground Storage Tank	550 gal
1190-2	Above-Ground Storage Tank	2,000 gal
1191	Vehicle Storage	2,560
1192	Vehicle Storage	2,560

Building #	Description	Est. Sq. Ft.
1194	Animal Barn	1,787
1195	Animal Shelter	848
1201	Animal Pen	436
1203	Storage	436
1204	Animal Pen	436
1205	Animal Pen	436
1206	Animal Building	484
1207	Animal Building	637
1235	Animal Pen	369
1253	Animal Pen	369
1255	Animal Pen	369
1256	Animal Pen	369
1270	Animal Shelter	424
1271	Animal Shelter	693
1272	Animal Shelter	424
1280	Feed Storage	1,152
1286	Sewage Pumping Station	36
1287	Animal	565
1288	Laboratory	504
1289	Poultry Building	565
1291	Poultry Building	565
1292	Animal	565
1294	Animal Shed	1,200
1302	Cage Washing Building	1,030
1320	Post-Mortem Building	5,800
1325	Poultry Building	4,960
1326	Sewage Pump Station	65
1328	Poultry House	450
1329	Poultry House	450
1330	Storage Shed	848
1331	Incinerator	800
1350	Animal Shelter	424
1351	Animal Shelter	424
1352	Animal Shelter	424
1353	Animal Shelter	424
1354	Animal Shelter	264
1355	Animal Shelter	264
1380	Animal Pen	384
1381	Animal Pen	384
1382	Animal Pen	384
1383	Animal Pen	384
1384	Animal Pen	384
1390	Animal Pen	436
1391	Animal Shelter	848
1392	Animal Shelter	848
1393	Animal Shelter	848
1401	Animal Shelter	477

Building #	Description	Est. Sq. Ft.
1403	Animal Shelter	477
1405	Animal Shelter	477
1406	Animal Shelter	477
1407	Animal Shelter	477
1408	Animal Shelter	477
1420	Laboratory	1,098
1422	Animal Barn	3,000
1423	Storage	271
1424	Animal Paved Lot Shelter	4,250
1425	Animal Barn	2,025
1426	Animal Paved Lot Shelter	507
1427	Animal Shelter	517
1428	Animal Shelter	52
1429	Animal Shelter	240
1430	Animal Shelter	271
1437	Animal Pen (Boar Hut)	52
1500	Sewage Pumping Station	242
Land	Owned Land	559 acres
Land	Owned Land	362 acres
Land	Owned Land	386 acres
Land	Owned Land	2,981 acres
Land	Owned Land	2,253 acres
U.S. National Arboretum		
NA01	Kiln #1 (Brickyard)	804
NA05	Kiln #5 (Brickyard)	804
NA08	Garden Storage	86
NA09	"M" Street Restrooms	465
NA10	Dogwood Rain Shelter	288
NA11	Kiln #10 (Brickyard)	804
NA12	Shop	5,500
NA12	Stack #10 (Brickyard)	2,931
NA13	Equipment Storage	2,100
NA13A	Chemical Marshall Facility	183
NA14	Heavy Equipment Storage	2,480
NA15	Equipment / Supply Storage	4,900
NA16	8-Bay Brick Garage	2,418
NA17A	Lath House	15,000
NA18	Headhouse / Greenhouse	22,492
NA18A	Tissue Culture Trailer	696
NA19	Administration Building	39,415
NA20	Arbor House / Gift Shop	2,700
NA20A	Arbor House Restrooms	1,033
NA21	Gazebo (Azalea)	288
NA22	China Valley Restrooms	284
NA23A	Polyhouse	2592
NA23B	Polyhouse	2592
NA23C	Polyhouse	2592

Building #	Description	Est. Sq. Ft.
NA23D	Polyhouse	2592
NA23E	Polyhouse	2592
NA23F	Polyhouse	1,813
NA23G	Polyhouse	1,813
NA23H	Polyhouse	1,813
NA23I	Polyhouse	2,718
NA24	Pot Storage	500
NA25	Flammable Liquid Storage	220
NA26A	Tool Shed	60
NA26B	Tool Shed	60
NA26C	Tool Shed	60
NA26D	Tool Shed	60
NA26E	Tool Shed	60
NA26F	Tool Shed	60
NA26G	Tool Shed	60
NA26H	Tool Shed	60
NA26I	Tool Shed	60
NA26J	Tool Shed	40
NA26K	Tool Shed	60
NA27	Japanese Bonsai Pavilion	8,450
NA27A	North American Pavilion	4,616
NA27B	Chinese Pavilion	8,784
NA27C	International Pavilion	4,337
NA28	Herb Garden Potting	287
NA29	Asian Pagoda	634
NA30	Gazebo (Beech Pond)	6 pillar
NA31	Spring House	400
NA32	Spring House	400
NA40	"R" Street Guardhouse	148
NA40	Gateway "R" Street	35 linft
NA41	Gateway Bladensburg Road	35 linft
NA42	Gateway New York Avenue	57 linft
NA43	Gateway "M" Street	100 linft
NA44	Dogwood Fountain	24 ft
NA46	Dwarf Conifers Pavilion	216
NA47	Locker Room (Brickyard)	3,480
NA47	Drainage System	1 system
NA48	Drying Tunnels (Brickyard)	3,480
NA49	New York Avenue Parking Lot	174,240 linft
NA50	Water Lines	18,080 linft
NA51	Conifer Road Gates	35 linft
NA52	Concrete Box Culvert	16 linft
NA53	Concrete Box Culvert	16 linft
NA54	Concrete Box Culvert	16 linft
NA55	Morrison Garden	1 garden
NA56	Iron Fence / Masonry Wall	140 linft
NA57	Capital Columns	22 columns

Building #	Description	Est. Sq. Ft.
NA58	Road System	9 miles
NA59	Herb Garden Fountain	18 ft
NA60	Pump house (Asian Spillway)	100
NA61	Arbor House Sculpture	4 objects
001-1	Underground Storage Tank	2,000 gal
001-2	Underground Storage Tank	1,500 gal
Courtyard	Bonsai Courtyard / Grow-out Area	1 courtyard
Land	Owned Land	444.9 acres
Presque Isle, ME		
PIM001	Office / Laboratory	407
PIM002	Greenhouse	1,256
PIM003	Barn	2,099
PIM003-1	Above-Ground Storage Tank	275 gal
PIM003-2	Above-Ground Storage Tank	275 gal
PIM005	Office / Laboratory	700
PIM005-1	Above-Ground Storage Tank	275 gal
PIM005-2	Above-Ground Storage Tank	275 gal
PIM006	Storage	1,188
PIM007	Office / Laboratory	1,166
Land	Owned Land	.6 acres
Land	Owned Land	.4 acres
Chatsworth, NJ		
CNJ001	Laboratory / Office	1,253
CNJ002	Headhouse	1,164
CNJ004	Greenhouse – As	2,880
CNJ005	Greenhouse - New	2,880
CNJ006	Headhouse	784
CNJ008	Greenhouse	1,296
CNJ100	Cold Frame	1,344
CNJ200	Cold Frame	1,344
CNJ300	Cold Frame	1,344
CNJ400	Cold Frame	1,344
CNJ500	Cold Frame	1,344
CNJ600	Cold Frame	1,344
CNJ700	Cold Frame	1,344
CNJ800	Cold Frame	1,344
CNJ900	Cold Frame	1,344
CNJ1000	Cold Frame	1,344
CNJ1100	Cold Frame	849
CNJ1200	Cold Frame	96
CNJ1300	Triangle Field Pumphouse	64
McMinnville, TN		
000	SCA Space	1800
001	SCA Space	2000
002	SCA Land	4 acres
Chapman, ME		
CM001	Quarantine Change Facility	315

Building #	Description	Est. Sq. Ft.
CM002	Farm Machine Storage	3,000
CM002-1	Above-Ground Storage Tank	500 gal
CM003	Potato Storage	2,400
Land	Owned Land	5 acres

Glenn Dale, MD

B05	Old Pond Drive Bridge	60 ft
GD00	Screened Corridor	1,791
GD01	Main Office	1,027
GD02	Laboratory	732
GD03	Office / Laboratory	1,107
GD04	Headhouse	3,340
GD07	Greenhouse	2,400
GD08	Greenhouse	1,900
GD09	Greenhouse	1,800
GD13	Cold Frame	450
GD14	Storage	420
GD16	Storage	1,750
GD21	Office / Laboratory	763
GD22	Greenhouse	287
GD23	Greenhouse	494
GD25	Office / Laboratory	213
GD26	Greenhouse	1,505
GD27	Headhouse	560
GD28	Greenhouse	2,335
GD29	Greenhouse	2,898
GD30	Laboratory	578
GD31	Greenhouse	2,935
GD36	Sewage Shelter	21
GD46	Garage	771
GD47	Office Trailer	495
GD48	Pesticide Storage	353
Land	Owned Land	70 acres

National Agricultural Library

20884	National Agricultural Library (16 Levels)	340,460
NAL	Underground Storage Tank	1,000 gal
NAL-1	Underground Storage Tank	20,000 gal

APPENDIX D: REQUIRED RECORDS AND REPORTS

REQUIRED REPORTS THAT ARE PROVIDED TO CUSTOMERS EXTERNAL TO THE SERVICE PROVIDER

Report Title Permit #	Submit Report to:	Freq. / Due Date	PWS Ref.
Accident Report	COR	4 hrs after verbal notification of occurrence or 3 days after written notice of occurrence	C.1.8.3.1
Acknowledgement of Risk associated with working in research environment	COR	30 Days After Award	C.1.8.1.2
Affirmative Procurement	EPA	Annually	C.1.11.3, C.2.3.17
After Hour Emergency Log		As Necessary	C.2.3.04
Air Emissions Inventory Report	EPA / MDE	10 days prior to MDE annual due date	C.2.3.13.1
Animal Care Inspection Report		Semi -Annually	C.2.3.08
Beltsville Area Accumulation Area Checklists			
Boiler Preventive Maintenance Log	COR	Monthly	C.2.2.02
Boilers	EPA / MDE	Annually / Sept 1	C.2.2.02
Building Access Report	Security Office	Monthly	C.2.3.19
Building Occupancy Certification Reports / New Buildings			C.2.3.08
Certificate of Potability	MDE	Per Well	C.2.2.21
Certification / Testing	COR	10 working days after inspection	C.2.2.03.2
Certification of Refrigerant Monitoring	COR	Annually / Sept 30	C.2.2.16
Clean Water Act and Safe Drinking Water Act Program	COR	Oct 1, 2005	C.2.3.09.1.1, C.2.3.09.1.2.
Composting	MDA	Every 2 years	C.2.2.10.9
Conduct Annual Signage Survey	COR	Oct 1	C.2.2.17.1
Customer Cost and Work Status Report	Effectuated Customer	Monthly – no later than the 10th	C.2.3.08
Dept. of Health and Human Services		Monthly	
Develop energy projections for fiscal year	COR	March 31	C.2.3.07.3
Emissions Report	COR	Annually / Sept 30	C.2.2.02.3
Employee Exit Checklist		As Necessary	C.1.4.3
Employee Listing	COR	30 Days After Award	C.1.7.3
Energy Budget	COR	Quarterly	C.2.3.10.2
Environmental Assessments	Council of Env. Quality	As Needed	C.2.3.09
Equipment Inventory	COR	Annually / Sept 30	C.2.3.16, C.3
Equipment Maintenance Report	COR	Monthly – no later than the 15th	C.2.3.23, C.3.2
Facility-wide work plan	COR	Annually Sept. 15	C.2.3.08.9

Report Title Permit #	Submit Report to:	Freq. / Due Date	PWS Ref.
Federal Facilities Agreement	EPA	Annually	
Greenhouse Work Order Report	Greenhouse Manager	Monthly	C.2.2.09
Hydrant Flow Test Results	MDE / COR	10 days of testing and Upon Request	C.2.2.21.8.2
Incinerators / 16-00667	EPA / MDE	Every 3 Yrs / Aug 31	C.2.3.13
Incidence Report	COR	Upon occurrence	C.2.2.21.2
Job Order Tracking System (JOTS)		Monthly	C.2.3.08.18
Land Application / Analysis / Generator Report S97164345A	EPA / MDE	Semi-Annual	C.2.2.05
Maryland Big Game Possession Tag Report	MD Dept of Natural Resources	Weekly during hunting season	C.2.3.25
Monthly Schedule of inspection, maintenance and testing smoke/fire equipment	COR	14 days after award	C.2.2.18.4
Non Federal Employee Report	Head of FMOD	Monthly	C.1.4
NPDES East Side / MD0020842	EPA / MDE	Monthly	C.2.2.21.2
NPDES West Side / MD0020851	EPA / MDE	Monthly	C.2.2.21.2
OMS Work Order Report	FMOD	Monthly	C.2.3.26
Performance Management Report	COR	Monthly – no later than the 15th	QASP 5.0
Pesticide Application Records	MD Dept of Ag	Annually	C.2.2.10.4
Pesticide Inventory	SOHES	Annually / Sept 30	C.2.2.10.4
Pollution Prevention	EPA	Annually / Jul 31	
Potable Water (Chem Analysis)	EPA / MDE	Every 2 years	C.2.2.21, C.2.2.22
Preventive Maintenance/Inspection Plan	COR	30 Days After Award	C.2.2.15.2
Proximity Card Audit	Security Office	Annually	C.2.3.19
Reimbursable Report	ANRI	Monthly	C.2.3.26
Reimbursable Report	BHNRC	Monthly	C.2.3.26
Reimbursable Report	PSI	Monthly	C.2.3.26
Renaissance-93 Budget Report	COR	Monthly	C.2.3.08.13
Repair & Maintenance Assessment Budget Report		Monthly	C.2.3.08
Respirator Clearance / FOH-22	SOHES		C.2.3.18
Signage Survey	COR	Annually Sept.30	C.2.2.17.1
Security Code Audit	Security Office	Annually	C.2.3.19
Security Incident Report	COR / PSO	1 hr of occurrence	C.1.7.6, C.2.3.19
Security System Report	Security Office	Monthly	C.2.3.19
Security System User Report	Security Office	Semi -Annually	C.2.3.19
Sediment & Erosion / PER PROJECT	EPA / MDE	Per Project	
Sewage Sludge Utilization / S97164345A	EPA / MDE	Every 5 years	C.2.2.21
Sludge Analysis Report / S97164345A	EPA / MDE	Annually	C.2.2.21
Sludge Generator Report / S97164345A	EPA / MDE	Annually	C.2.2.21
Smoke/fire maintenance and fire service deficiency report	COR	Upon occurrence	C.2.2.18.5
Spill Response Contingency Plan	RFP	RFP Date	C.2.3.10.3
Update to Contingency Plan	COR	Within 30 days of any plan change	C.2.3.10.3
Storm Water Management	EPA	Annually	C.2.2.21

Report Title Permit #	Submit Report to:	Freq. / Due Date	PWS Ref.
Temp Report Bldg 161 (A/C Shop)	Research leader in 161	Daily	C.2.2.11
Tier II	EPA / MDE / PG / LEFC	Annually / Mar 1	
Toxic Release Inventory (TRI)	EPA / MDE	Annually / Jul 1	
Transportation Report / S97164488T	EPA / MDE	Annually	
UST'S	MDE / DC	Upon Closure	
Utility Central Heating Plant Log (BARC 014)	Facility Log	Daily	
Utility Fuel Oil Usage Log	Facility Log	5x Daily	C.2.2.02
Utility Hot Air System Report	COR	Annually	C.2.2.02
Utility Hot Water Heating System Report	COR	Annually	C.2.2.02
Utility Natural Gas Usage Log	Facility Log	5x Daily	C.2.2.02
Utility Recycled Water Meter Log	Facility Log	Daily	C.2.2.02
Utility Steam Flow Meter / Boiler Hours Log	Facility Log	5x Daily	C.2.2.02
Utility Central Heating Plant Shift Maintenance Report (BARC 014)	Facility Log	Daily	C.2.2.02
Utility Boiler Service Log	Facility Log	Daily	C.2.2.02
Utility Boiler Water Report	Facility Log	Per Shift	C.2.2.02
Utility Mechanic Report	Facility Log	Per Shift	C.2.2.02
Utility Steam Heating System Report	COR	Annually	C.2.2.02
Vehicle Inspection Correction Report	COR	Annually / Sept 30	C.2.3.23, C.3.2
Vehicle Maintenance Usage Report	COR	Quarterly - no later than the 30th of the last month	C.2.3.23, C.3.2
Vehicle Mileage Report	COR	Weekly	C.2.3.23, C.3.2
Warranty Log	COR	Updated as equipment is added or warranty expires / Upon Request	C.2.3.08.7
Waste Oil / By-product Removal Plan	COR	RFP Evaluation Criteria	C.2.3.24
Wastewater Discharge Report	EPA / MDE	Monthly	C.2.2.21
Wastewater Monitoring Report	EPA / MDE	Monthly	C.2.2.21
Wastewater Operating Report	EPA / MDE	Monthly	C.2.2.21
Water Appropriation / PG90G012	PG COUNTY	Semi-Annual	C.2.2.21
Water Treatment Plant Monitoring Report	EPA / MDE	Annually	C.2.2.21
Water Treatment Plant Operating Report	EPA / MDE	Monthly	C.2.2.21
Well Drilling	PG County	Per Well	C.2.3.08
Work Order Report / Auto Shop	Farm Operations	Monthly	C.2.2.23
Work Plans	COR	Annually / Sept 30	C.2.3.08.9

APPENDIX E: GOVERNMENT FURNISHED ITEMS

APPENDIX E1: GOVERNMENT FURNISHED FACILITIES

THIS TABLE IDENTIFIES THE FACILITIES (ALL OR PARTIAL) OFFERED TO THE SERVICE PROVIDER AS A PHYSICAL LOCATION TO OPERATE. OFFERED FACILITIES INCLUDE FURNISHINGS CURRENTLY LOCATED IN THE AREAS (DESKS, TABLES, CHAIRS, CABINETS, TELEPHONES, AND OTHER OFFICE EQUIPMENT). REFER TO THE TECHNICAL LIBRARY TO VIEW THE LOCALITY OF THESE FACILITIES. BUILDINGS DESIGNATED AS "PARTIAL" WILL BE SHARED WITH GOVERNMENT EMPLOYEES.

Building #	Portion Offered	Description	Est. Sq. Ft.
BARC			
001	Partial	Office #009, Rm 020	213
003	Partial	Office Space and Mechanical Rooms	33960
004	Partial	Offices #022, 023, 024	441
005	Partial	Office	716
010A	Partial	Office #009	100
012	Partial	Service Building / Office	220
013	100%	4 Bay Shop, 3 Office, 2 Restrooms	7442
013A	100%	Storage / Garage	480
014	100%	Central Heating Plant	6360
015	100%	Wastewater Treatment Plant	15190
029	Partial	Service	4970
029A	Partial	Storage, Rm 009	
047A	Partial	Rms 105 and 105A	444
165	100%	Dairy Boiler Plant	960
200	Partial	Office #100	
202	100%	AHU Boiler Plant	1380
218	100%	Sewage Disposal Plant	1235
218G	100%	Office Building	1,469
218H	100%	Mechanical Screen Building	686
218I	100%	Chemical Building	530
218J	100%	Operations Building	998
261	100%	Heating Plant	1963
288	Partial	Storage	1365
289	100%	Storage	1,730
301	Partial	Office, Lunch Room, Locker Room	1710
301B	100%	9 Bay Shop, Office, Restroom	1877
306	Partial	Office #304	391
306	Partial	Room #313A	188
307	Partial	Office Space #101and #238	360
309	100%	Service Building / Laboratory	27740
310	100%	Water Treatment	2800
421	Partial	Office #002 / Storage Rm #001, 003, 004	1208

Building #	Portion Offered	Description	Est. Sq. Ft.
426	100%	Mechanical Shops	21860
426A	Partial	Engineering Building (exclude Office #101)	2995
427	100%	Mechanical Shops – East Garage	9280
427A	100%	Storage Shed	76
429	100%	Mechanical Shops – East Garage	6096
430	100%	Sheetmetal Warehouse	3200
431	100%	Paint Shops	2200
432	100%	Storage	4386
445	100%	Automotive Shop	8610
446	Partial	4 Bay Shop, Storage Area	2925
448	100%	Storage	2500
449	100%	Storage	5596
454	Partial	1 Bay Shop, Office, Covered Storage	15003
506A	100%	Garage	1570
513	100%	Office	1845
513A	100%	Garage	996
514	100%	Storage	1000
Shed E	Partial	Pesticide Storage, Records, Wash	81
Shed W	Partial	Pesticide Storage, Records, Wash	76
NAL			
NAL 20884	100%	NAL – Basement Room #3	428
	Partial	NAL – Basement Supply Cage B1	1050
	Partial	NAL – Basement Workshop Room B2	1100
	Partial	NAL – Basement Welding Room B3	432
	100%	NAL – Office #201	210
	Partial	NAL – 5 th Floor Workshop Room 5M	270
	Partial	NAL – Penthouse Workshop Room P1	289
USNA			
NA12	100%	Shops, Office, Locker room, Lunchroom	5500
NA13	100%	Equipment Storage	2100
NA14	100%	Equipment Storage	2480
NA15	100%	Heavy Equipment Storage	4900
NA19	Partial	Administration Building – Facility Mgr / Construction Rep. Office, Office Clerk, and Audio Visual Storage	428
	100%	Paint Shed	220
	100%	Container Storage	320
	100%	Container Storage	160
	100%	Ticket Kiosk	40

APPENDIX E2: GOVERNMENT FURNISHED EQUIPMENT

THIS TABLE IDENTIFIES ALL EQUIPMENT OFFERED TO THE SERVICE PROVIDER

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
BARC					
Acetylene Hose - 12 ft				4	A/C Shop
Acoustical calibrator		AC-94	4983	1	Safety Department
Adjustable Wrench				2	Maintenance Dept
Adjustable wrench 10"				1	CHP/WWTP
Adjustable wrench 12"				1	CHP/WWTP
Adjustable wrench 6"				1	CHP/WWTP
Adjustable wrench 8"				1	CHP/WWTP
Air Compressor	Ingersol Rand	2420N5	30T-777325	1	013
Air Compressor	Champion	HR5-8	R1579964	1	301
Air Compressor	Kellog	462B050H	781613	1	445
Air Compressor		11568 / 175 PSI		1	448
Air Compressor	Sears	10217171	K550780	1	513A
Air Compressor				1	Bldg. 426, Rm. 119A
Air Compressor	Thomas	T30		1	Carpentry Shop
Air Compressor - Portable	Speedaire	4B219		1	010A, 010B
Air Compressor - Portable				4	A/C Shop
Air Compressor - Portable	Dayton			1	CHP/WWTP
Air Compressor - Portable	Speedaire			1	CHP/WWTP
Air Compressor - Shop				1	A/C Shop
Air Compressor - Vertical	Ingersol Rand			1	CHP/WWTP
Air Conditioner	Freidrich			1	513
Air Conditioner	Fedders			1	513
Air Hose Reels				9	301B/013/454/445
Air Quality Tester	Bacarac			1	Electrical Shop
Air Sampler with 5 separate Alpha-1 pack		Alpha-1	05067, 05034, 05012, 05006, 05033	1	Safety Department
Air Tank - Portable				1	010A, 010B
Air Velocity Meter		1650	1661	1	Safety Department
Airator	Ryan	544859-8810	127278	1	030
Alignment	John Bean			1	445
Alignment	Snap-on		961	1	445
Allen Wrench Set	Dayton			1	Maintenance Dept
Allen Wrench Set				1 Set	Refrigeration Shop
Amperage Meter	AW Sperry	DSA 7610A		1	010A, 010B
Amperage Meter				1	Electrical Shop
Amperage Probe				6	Refrigeration Shop
Amprobe Recovery Unit	Promax	RG5000		1	010A, 010B
Analyzer Can - Electrical Safety		Electrical Analyzer		1	Safety Department

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Analyzer, pH and ORP	Foxboro	873PH-AIZFGZ-7	AIT-540	1	Water Plant
Anameter	Davis			2	A/C Shop
Anemometer - Mini		491, Series 490	LVE-3776-I	1	Safety Department
Answering Machine	Panasonic		5FATE012199	1	513
Arrestor - 630 volt	Franklin		2-650	3	310
Asphalt Cutter	Saw Devil	CS2	3800356	1	454
Audio Dosimeter		MK3	37187	1	Safety Department
Audio Dosimeter		MK3	37186	1	Safety Department
Audio Dosimeter		MK3	37188	1	Safety Department
Automotive A/C Compressor Test Kit				1	A/C Shop
Automotive A/C Gauge Set				1	A/C Shop
Automotive A/C Compressor Seal Kit				1	A/C Shop
Backpack Sprayer				9	301B/013/454/445
Balometer	Alnor	634-593-132	BJ4523	1	010A, 010B
Band saw	Jet	OCP03-04	WJ3426	1	454
Band saw				1	A/C Shop
Band saw	Delta	20"		1	Carpentry Shop
Band saw - 15"	Dayton	2AC27		1	426, Rm 119
Band saw - 15" Metal	Dayton	3X918C		1	426, Rm 119
Band saw - Portable	Milwaukee			1	CHP/WWTP
Band saw - Portable	Port-A-Band			1	Electrical Shop
Band saw - Portable		Model 72		1	Bldg. 426, Rm. 119A
Band saw floor type	Greenlee			1	CHP/WWTP
Band saw-Portable	Milwaukee	CAT6236		1	Bldg. 218
Battery Chargers				5	301B/013/454/445
Batwing	Woods	315HD		1	301
Bearing Puller				2	A/C Shop
Bearing Puller				1	Electrical Shop
Bearing Puller - Bushing Kit				1	A/C Shop
Bed Edger Blue	Trench Master		2322	1	301
Bed Edger Red			6254	1	301
Belt Grinder	Baldor			1	CHP/WWTP
Belt Grinder with stand	Baldor	CAT 2048-151D		1	218
Belt/Disc Sander - Floor Mounted				3	Carpentry Shop
Bench Grinder		10"		1	Carpentry Shop
Bench Grinder - 6"				1	Maintenance Dept
Bench Grinder with pedestal	Milwaukee	5091 / 11 HP 10"		1	218
Bird Bombs				500	513
Blade Sharpener	Foley United	398	29F39803665	1	301
Blower	Echo	4600	43680	1	013
Blower	Echo	6000	18275	1	013
Blower	Echo	4600	43916	1	301

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Blower	Echo	4600	43883	1	301
Blower	Echo	4600	24339	1	301
Blower	Echo	4600	76330	1	301
Blower	Echo	4600	76330	1	301
Blower	Echo	46ln	7403	1	301
Blower Vacuum	Saxon	91PN474114	1098	1	301
Blower Vacuum	Saxon	91PN474114	1099	1	301
Blower Wheel Puller				2	A/C Shop
Bolt Cutters				4	301B/013/454/445
Book Shelf				10	513
Box Spreader	Fisher		3070	1	454
Box Spreader	Fisher		204748	1	454
Box Spreader	Fisher		204746	1	454
Box Spreader	Swenson			2	454
Box Spreader	Henderson Chief	FSP8	7970	1	454
Box Spreader	Flink	LMC5H	6199	1	454
Box Spreader	Flink	H8-34	8305	1	454
Brad nailer	Porter-Cable			1	Carpentry Shop
Brake Lathe	Aamco		36512	1	445
Broom				2	513A
Brush Cutter	Sthil	FS360	131943627	1	301
Brush Cutter	Echo	4600	88110	1	301
Bulb Auger	Echo	EDR2400	3277	1	013
Bulb Auger	Echo	EDR2400	50596	1	301
Cabinet - Filing				3	513
Cabinet - Storage				1	513A
Cable, Connecting	STI	037-3176-100		1	Water Plant
Cage	Allentown Equip. Co.			1	513A
Calibration Kit, Formazin	Hach	44156-00		1	Water Plant
Calibrator - Buck		M-5	6905	1	Safety Department
Calibrator - Primary Flow		Gilibrator	11101-5	1	Safety Department
Cap Tube Pump Kit				1	A/C Shop
Capacitor Tester	Supco			1	010A, 010B
Capacitor Tester				2	Refrigeration Shop
Carbon Monoxide Indicator		Model 70	1036	1	Safety Department
C-Clamps - Misc.				50	301B/013/454/445
Chain Fall - 20 ft				1	010A, 010B
Chain Hoist - 1 ton				1	A/C Shop
Chains				10	301B/013/454/445
Chainsaw	Sthil	E14	34805736	1	013
Chainsaw	Sthil	290	331764641	1	013
Chainsaw	Echo	CS3000	9827	1	013
Chainsaw	Echo	CS5000	12198	1	013
Chainsaw	Sthil	25	230416256	1	301
Chainsaw	Sthil	25	231605392	1	301

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Chainsaw	Sthil	29	11270113044	1	301
Chainsaw	Sthil	38	336000385	1	301
Chainsaw	Sthil	4438	120260110	1	301
Chainsaw	Sthil	44	135086609	1	301
Chainsaw	Sthil	56	120863380	1	301
Chainsaw	Sthil	64	122057110	1	301
Chainsaw	Sthil	019T	236755095	1	454
Chainsaw				4	Maintenance Dept
Chairs				18	513
Chalkline / Laser		XL		1	Carpentry Shop
Charger - Digital				1	Refrigeration Shop
Chipper	Eagar Beaver	290	486SE1516L W006733	1	301
Chisel - Air Tool				1	A/C Shop
Circuit Tester	Snap-on			2	A/C Shop
Circuit Tracer				1	Electrical Shop
Clamp Meter				1	A/C Shop
Clock - Wall				3	513
CO2 Bottle and Regulator				1	513
CO2 Chamber				1	513
Coat Rack				3	513
Combin. wrench 15 pc. Set				1	CHP/WWTP
Combin. wrench set 5/8-1" 7 pc.				1	CHP/WWTP
Combustible Gas Indicator		Explosimeter Model 2A	13019	1	Safety Department
Combustible gas leak detector			3032	1	Safety Department
Come Along - 1 ton				1	CHP/WWTP
Come Along - 3/4 ton				1	CHP/WWTP
Commissioning Tool	Johnson Controls	M9000-200		1	010A, 010B
Compound Gauge Set	Ritche Yellow Jacket			1	010A, 010B
Compressor	U.S.	MK863	34993MK	1	454
Computer Interface for Alpha-1				1	Safety Department
Conabear				30	513
Concrete Saw - Gas				1	Carpentry Shop
Conductivity meter	Hach	C0150	5015-00	1	310
Confined Space Blower				1	A/C Shop
Confined Space Protective Gear				1 Set	A/C Shop
Continuity Tester				1	Electrical Shop
Controller	Foxboro	743CB-AP	HIC-542	1	Water Plant
Crescent Wrench - Assorted				1	010A, 010B
Cut saw 2 speed	B & D	3102-09		1	Carpentry Shop

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Cutting Torch Kit				1	Bldg. 448
Cutting torch with cart				1	CHP/WWTP
Data line		MDL500	30203003801, 30203003802, 30203003803, 30203003804, 30203003805	5	310
Demo trainer set	Honeywell			1	CHP/WWTP
Desk				6	513
Diagonal Cutter				1	Maintenance Dept
Diffuser	De Clz	LPD-250		1	310
Digging Bar				1	513A
Diode Tester				1	A/C Shop
Disc - 12"/ Belt - 6" Sander	Rockwell	31-710	FU1485	1	426, Rm 119
Dishwasher	Roper		958994	1	513
Dolly - 4 Wheel				5	A/C Shop
Double tool	Wright			1	218
Dozer plow - 4.5'	John Deere		M02870X5552 28	1	013
Dozer plow - 4.5'	John Deere		M0038061301 09	1	301
Dozer plow - 4.5'	John Deere		M00380B1005 0	1	301
Drain Cleaner				1	010A, 010B
Drawers				6	513
Drill	Hilti	TE10A	07-228672	2	426, Rm 119A
Drill - ½	Rockwell	768		1	Carpentry Shop
Drill - ½HD	Shop Mate	359		1	Carpentry Shop
Drill - ½Reversing	Porter-Cable	7554		1	Carpentry Shop
Drill - 1"				1	Electrical Shop
Drill - 1/2 Electric	Porter-Cable			1	Carpentry Shop
Drill - 1/2" Electric				3	Maintenance Dept
Drill - 12v	Dewalt			1	Carpentry Shop
Drill - 18v Cordless & case	Dewalt			1	Carpentry Shop
Drill - 18v Cordless & case	Makita			1	Carpentry Shop
Drill - 3/8 Electric	Makita			1	Carpentry Shop
Drill - 3/8 Electric	B & D			1	Carpentry Shop
Drill - 3/8"	Skil			2	A/C Shop
Drill - 3/8"				1	Electrical Shop
Drill - 3/8" Electric				1	Refrigeration Shop
Drill - 3/8"	Skil	410		1	Bldg. 426, Rm. 119A
Drill - Angle	Porter-Cable	7556		1	Carpentry Shop
Drill - Angle 3/8"				1	A/C Shop
Drill - Auger				1	Electrical Shop
Drill - Cordless				2	Refrigeration Shop
Drill - Cordless				1	Carpentry Shop
Drill - Cordless 12V	Milwaukee			1	010A, 010B

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Drill - Cordless 12V	Milwaukee			1	A/C Shop
Drill - Cordless 12V	Craftsman			1	A/C Shop
Drill - Cordless 18V	Black and Decker			1	A/C Shop
Drill - Core				1	Electrical Shop
Drill - Core				3	Carpentry Shop
Drill - Electric				3	301B/013/454/445
Drill - Magnetic	Retabroach	10904	762158	1	426, Rm 119A
Drill - Rechargeable	Dewalt			2	CHP/WWTP
Drill - Ryolal				1	Refrigeration Shop
Drill Bit Set				1	Maintenance Dept
Drill index	Dewalt			1	Carpentry Shop
Drill index 1/16 to 1/2				1	Carpentry Shop
Drill Press	Dayton	SZ1466	9906	1	301
Drill Press	Delta		41-2642	1	445
Drill Press	Jet	JDP-17MF	40437	1	454
Drill Press	Rockwell	15-608	1487097	1	454
Drill Press	Rockwell	2P	70-120	1	426, Rm 119
Drill Press				1	CHP/WWTP
Drill Press	Rockwell			2	CHP/WWTP
Drill Press	Dayton			1	CHP/WWTP
Drill Press - 16 1/2"	Delta			1	010A, 010B
Drill Press - 20"	Dayton	32919C		1	218
Drill Press - Bench				1	A/C Shop
Drill Press - Floor Mounted				2	Carpentry Shop
Drill Press / Table Mount				2	Maintenance Dept
Drill/case 12v	Dewalt			1	Carpentry Shop
Drill/case 18v	Dewalt			1	Carpentry Shop
Drill/Saws-all Cordless Combo	Porter-Cable			1	Carpentry Shop
Drop Light				1	010A, 010B
Drop Light				1	Refrigeration Shop
Drop Light - 25 ft				7	A/C Shop
Electric Circuit Tracer				1	A/C Shop
Electric range				2	CHP/WWTP
Engine	Wiscon			1	218
Engine	Allis-Chalmers	3500-4027665	3D-16615	1	218
Engine Analyzer	Sun	SUN101	9-23A2559	1	445
Exhaust Analyzer	Sun	MGA -90	48A2559	1	445
Extend-A-Stick - Fiberglass				1	Electrical Shop
Extension Cord - 100 ft				1	010A, 010B
Extension Cord - 25 ft				1	Refrigeration Shop
Extension Cord - 50 ft				1	010A, 010B
Fan - Floor				3	Maintenance Dept
Fastening system	Hilti	dx400B		1	Carpentry Shop
File Set				1	010A, 010B

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Filter Clz site tube	U.S.		UXD20947	1	310
Fire Extinguisher				1	Refrigeration Shop
First Aid Kit				1	Refrigeration Shop
Fit Test Unit N95 Companion	PortaCount	8020, 8095	15904, 10230, 10244	1	Safety Department
Flame safeguard control tester	Honeywell			1	CHP/WWTP
Flame Tester				2	Maintenance Dept
Flammable storage cabinet				1	CHP/WWTP
Flaring Block				1	Refrigeration Shop
Flaring kit				2	CHP/WWTP
Flaring Kit				1	Refrigeration Shop
Flaring Set				1	010A, 010B
Flashlight				5	Maintenance Dept
Floor stripper	Crain			1	Carpentry Shop
Flow Hood Meter	Extech			3	A/C Shop
Flow Test Kit	Midwest Instrument	841		1	010A, 010B
Flowmeter / Transmitter	Marsh-McBirney	284-8"	FE/FIT-101, 202, 305	3	Water Plant
Flowmeter / Transmitter	Marsh-McBirney	284-10"	FE/FIT-306	1	Water Plant
Flowmeter / Transmitter	Marsh-McBirney	284-12"	FE/FIT-404	2	Water Plant
Flowtube, Magnetic	Foxboro	800EA-WCR-PJGFGZ-A	FE-311, 321, 331, 341, 351, 361	6	Water Plant
Freezer	PH Environmental		4118	1	513
Freon Recovery System				1	Refrigeration Shop
Garden Hose				13	301B/013/454/445
Gas Detector		TEF8000 / MSHA 8800		2	426, Rm 119A
Gas Leak Tester - Flammable				3	Maintenance Dept
Gas Pump - 4" Tow Behind	Wiscon			1	CHP/WWTP
Gasket Cutter Set				1	A/C Shop
Gauge - Compound				2	Refrigeration Shop
Gauge - Vacuum				1	Refrigeration Shop
Generator - Portable	Coleman	Powermate PM0401850	86111520	1	301
Generator - Portable				1	Carpentry Shop
Generator - Portable	Honda	EN2500		1	A/C Shop
Generator - Portable	Yamaha			2	CHP/WWTP
Generator w/ Trailer	Onan	75		1	CHP/WWTP
Glass bead cabinet				1	CHP/WWTP
Grinder				3	301B/013/454/445
Grinder - 10" Pedestal	Milwaukee			1	CHP/WWTP
Grinder - 8"	Dayton	4Z909B		1	426, Rm 119

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Grinder - 8" Bench	Dayton			1	010A, 010B
Grinder - Air Tool				2	A/C Shop
Grinder - Angle				1	Electrical Shop
Grinder - Angle 4"				2	Maintenance Dept
Grinder - Bench				1	A/C Shop
Grinder - Bench	Baldor	439B	P4-95	1	013
Grinder - Bench	Craftsman	31910621	B9635	1	301
Grinder - Bench	Blue Point	BG100G	W6-91	1	445
Grinder - Bench	Craftsman	152-211520	0046-K	1	454
Grinder - Hand	Milwaukee			1	010A, 010B
Grinder - Saw Blade	Sthil	MDR242TFA316	122558131	1	301
Grinder - Surface	Dewalt			1	A/C Shop
Grinder / Power	Hilti	700		1	Carpentry Shop
Grinder 10"	Dayton			1	CHP/WWTP
Grinder 5"	B/D			1	CHP/WWTP
Grinder Saw - Portable	Bosch		0601-333-239	1	426, Rm 119A
Ground Hog Blaster	Custom			1	513
Hacksaw				1	010A, 010B
Hammer	Cutler	Series B-1	AN16GNOAB	4	310
Hammer				1	010A, 010B
Hammer	Milwaukee			1	Maintenance Dept
Hammer				8	Refrigeration Shop
Hammer - Chipping				1	Electrical Shop
Hammer Drill	Milwaukee			1	010A, 010B
Hammer Drill	Hilti	TE-72		1	426, Rm 119A
Hammer Drill	Hilti	TE5		1	Carpentry Shop
Hammer Drill	Hilti	TE72		1	Carpentry Shop
Hammer Drill	Rockwell	614		1	Carpentry Shop
Hammer Drill	Milwaukee			2	CHP/WWTP
Hammer Drill	Bosch			2	CHP/WWTP
Hammer Drill				1	Electrical Shop
Hammer Drill				1	Maintenance Dept
Hammer Drill - Right Angle	Milwaukee			1	A/C Shop
Hammer Drill Bits - Assortment				1	Carpentry Shop
Hand Brake - 8 ft	Chicago	5-816	312124	1	426, Rm 119
Hand Cart				2	A/C Shop
Hand Die Set	Century			2	Bldg. 426, Rm. 119A
Hand Saw				5	301B/013/454/445
Hand Tools				5 sets	Refrigeration Shop
Hand Tools - Misc.				1	426, Rm 119
Hand Truck				2	301B/013/454/445
Hand Truck				2	Refrigeration Shop
Hard Rake				12	301B/013/454/445

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Heat Street Computer				1	Safety Department
Heater - Portable				2	A/C Shop
Hedge Trimmer	Echo	HC2400	6958	1	013
Hedge Trimmer	Echo	HC2400	6209	1	013
Hedge Trimmer	Echo	HC2400	6960	1	013
Hedge Trimmer	Echo	HC1500	130038	1	013
Hedge Trimmer	Echo	HC2400	7216	1	301
Hedge Trimmer	Echo	SRM2400	1179	1	301
Hermetic Analyzer "Annie"		8220		3	A/C Shop
High Pressure Sprayer	Honda			1	CHP/WWTP
Hilti				1	A/C Shop
Hoe				8	301B/013/454/ 445
Hole Saw Kit				1	A/C Shop
Hydraulic Lift				2	A/C Shop
Hydraulic Lift - Rotary		PAL5E-7	L25602	1	446
Hydraulic Press				1	426, Rm 119
Hydro Crane	Stratton			1	CHP/WWTP
IAQ Monitor		Q trak plus 8554	3021008	1	Safety Department
IAQ Monitor		Q trak 8551	50081	1	Safety Department
Ice Chipper				10	301B/013/454/445
Illumination Level				1	Safety Department
Impact Wrench	Milwaukee			1	010A, 010B
Impact Wrench - 1/2" Electric				1	A/C Shop
Impact Wrench - Air Tool				1	A/C Shop
Impulse Sound Level Meter, Sound Level Calibrator		2226, 4230, 4129A	1692297, 1700731, 1669117	3	Safety Department
Infra red detector				1	CHP/WWTP
Iron worker 75 ton			7877500	1	426, Rm 119
Jack - Floor 2 1/2 ton	Power-Pac			1	Maintenance Dept
Jack - Large Tire				1	301B/013/454/445
Jacks - Floor				10	301B/013/454/445
Jack stands				10	301B/013/454/445
Jigsaw	Dewalt			1	010A, 010B
Jigsaw				1	A/C Shop
Johnson Bar				2	Bldg. 426, Rm. 119A
Joiner / Plate	Ryobi	JM80		1	Carpentry Shop
Jointer 12"				1	Carpentry Shop
Jump Box	Goodall	718		1	454
Jump Box				3	301B/013/454/445
Jump Starter				1	Maintenance Dept
Jumper Cables				7	301B/013/454/445
Key Machine – Code Machine	HPC	CodeMax 1200MAXAA		1	Locksmith Section
Knock Out Cutter - Hydraulic				3	Electrical Shop

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Knockout Punch Set		7310		1	Bldg. 426, Rm. 119A
Knock-out Set				1	Refrigeration Shop
Ladder - 10 ft				1	010A, 010B
Ladder - 10 ft	Werner			1	CHP/WWTP
Ladder - 12 ft				1	010A, 010B
Ladder - 12 ft	Werner			1	CHP/WWTP
Ladder - 20 ft				1	010A, 010B
Ladder - 20 ft				2	Carpentry Shop
Ladder - 20 ft	Werner			1	CHP/WWTP
Ladder - 24 ft				1	Carpentry Shop
Ladder - 24 ft				2	Maintenance Dept
Ladder - 24 ft				4	Refrigeration Shop
Ladder - 28 ft				1	010A, 010B
Ladder - 4 ft				1	010A, 010B
Ladder - 4 ft				2	A/C Shop
Ladder - 4 ft				5	Refrigeration Shop
Ladder - 6 ft				1	010A, 010B
Ladder - 6 ft				2	A/C Shop
Ladder - 6 ft				4	Refrigeration Shop
Ladder - 8 ft				1	010A, 010B
Ladder - 8 ft	Werner			1	CHP/WWTP
Ladder - 8 ft				2	Maintenance Dept
Ladder - 8 ft				1	Refrigeration Shop
Landscape Rake	Bobcat	LR5B	91000572	1	013
Lathe - Metal	Causing	6344	1326593	1	426, Rm 119
Leaf Rake				6	301B/013/454/445
Leaf Vacuum	Billy Goat		64447	1	013
Leak Detector	CPS	L790A		1	010A, 010B
Leak Detector	Hyde			3	A/C Shop
Leak Detector	Halogen			2	A/C Shop
Leak Detector - Ultrasonic - Freon				5	Refrigeration Shop
Level - 2 ft				1	010A, 010B
Level - Small				1	010A, 010B
Lifting Tripod w/ Lifting Harness				2	CHP/WWTP
Light Level Meter		214		1	Safety Department
Light Meter Battery Tester				1	Electrical Shop
Little Wonder	Honda	9HP		1	301
Loader Forks	JRB	544GTC	0703-110271-1	1	454
Locator Cable	Schonstedt	MAC-15B		1	426, Rm 119A
Lock Former	Pittsbourg & Flanger		51236-13867	1	426, Rm 119
Lock Out / Tagout Equipment				1 Set	A/C Shop

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Loppers				4	301B/013/454/445
Low Voltage Fastening Tool				1	A/C Shop
Maglock Repair/Installation Tool				2	Maintenance Dept
Magnetic coils	Fumas	60HZ	75D73070A	7	310
Marking tool	Schmidt	4	49182	1	310
Megger				1	Electrical Shop
Mercury Vapor Analyzer		431-X	1976	1	Safety Department
Message Board				1	513
Metal Saw	Scotchman	BCWO 350/LT	37124077	1	426, Rm 119
Metal Saw - 14"	Homelite			1	448
Meter - Alkalinity	Hach	38042	20637-0	1	310
Meter - C/2	Hach	46700-00	971000111808	1	310
Meter - C/3	Hach	DR100	41100-02	1	310
Meter - PH	Accumet	10	C9005485	1	310
Meter - Temperature Air Flow				2	Refrigeration Shop
Meter - Turbidity	Hach	2100N		1	310
Microwave	General Electric		731000GEMI C0V	1	513
Microwave	General Electric		AD9401695	1	513
Midicon micro		612	2002116, 310303255, 30028887, 31030325562	4	310
Milling Machine	Rock Well		1541827	1	426, Rm 119
Monitor - Digital Oxygen		Product 6873		1	Safety Department
Mortiser				1	Carpentry Shop
Motor Megger	Supco			1	010A, 010B
Motor Teel	Baldor	UM3538	W0008101883	2	Work room
Mower	ExMark		71150	1	013
Mower	Hustler	927137	3050019	1	013
Mower	Gravely		603168	1	301
Mower	ExMark		80778	1	301
Mower	Billy Goat	2400	60496116	1	301
Mower	Honda			1	CHP/WWTP
Mower	Gravely			1	CHP/WWTP
Multi-meter	Soltec			4	A/C Shop
Multi-meter Analog				1	Refrigeration Shop
Multi-tool	Dremel			1	A/C Shop
Multi-tool	Rotozip			1	Carpentry Shop
Multi-tool	Dremel			1	CHP/WWTP
Noise Cannon (Scare Away)	Thunderbird			1	513
Nut Driver Set				2	Maintenance Dept
Ohmmeter				1	Maintenance Dept
Oil Waste Pump	Myers	Husky 715		1	301

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Organic Vapor Meter, Time-keeper, Battery Assembly		580B OVM	580B-39951-262E	1	Safety Department
O-ring Slicing Kit				1	A/C Shop
Oscilloscope				1	Electrical Shop
Oven - Lab	Grieve	LO201-C	627013	1	310
Oven - Toaster	Toastmaster			1	513
Oxygen - Acetylene Torch	Victor			1	CHP/WWTP
Oxygen / Acetylene Hose				6	A/C Shop
Packing Hook Set				1	A/C Shop
Palm Sander	Milwaukee			1	010A, 010B
Pan Brake - 4 ft	Chicago	W-31	116835	1	426, Rm 119
Panel Saw				1	Carpentry Shop
Paper Cutter	Premier			1	513
Parts Cleaner	Zep			1	445
Parts Washer				1	A/C Shop
Passport Personal Alarm		Passport	B2153	1	Safety Department
Personal Air Sampler and Charger		Gilian Universal HFATR-5	14553, 14530, 14779, 14552, 14766 & 101	5	Safety Department
pH Tester	Oakton			1	010A, 010B
Phase Meter				1	Electrical Shop
Photo ionization Air Monitor		Photovac	CE ED K 311	1	Safety Department
Photo ionization Gas Detector		PGM-7600	110-004256	1	Safety Department
Pipe / Tube Bender				3	Refrigeration Shop
Pipe Bender - Hand/Leverage				1	Electrical Shop
Pipe Bender - Hydraulic				1	Electrical Shop
Pipe Bender - Mechanical				1	Electrical Shop
Pipe Cutter				1	Bldg. 426, Rm. 119A
Pipe die sets	Rigid			7	CHP/WWTP
Pipe Dies ½ to 2"				1	Bldg. 448
Pipe Finder	Radio Detection			1	448
Pipe Machine - Cut and Thread				1	Electrical Shop
Pipe Threader		Model 700		1	Bldg. 448
Pipe Threader and Stand	Ridgid	700		1	Bldg. 426, Rm. 119A
Pipe threading machine	Rigid	535		1	CHP/WWTP
Pipe threading machine with wheeled storage cart	Rigid	535		1	CHP/WWTP
Pipe Treading Machine	Ridgid	535		1	010A, 010B
Pipe Vice Threader	Ridgid	535		1	448
Pipe Vice Threader	Ridgid	1224	EB09165H95	1	426, Rm 119
Pipe wrench - 12"				3	CHP/WWTP
Pipe wrench - 14"				2	CHP/WWTP

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Pipe Wrench - 16"				1	Refrigeration Shop
Pipe Wrench - 18"				4	Refrigeration Shop
Pipe wrench - 18"				2	CHP/WWTP
Pipe Wrench - 24"				3	Refrigeration Shop
Pipe wrench - 24"				4	CHP/WWTP
Pipe Wrench - 48"				2	Bldg. 426, Rm. 119A
Pipe Wrench - Assorted				1	010A, 010B
Pipe Wrench Set - 14" - 24" Set				2	Maintenance Dept
Pipe Wrench Set - 36" - 48" Set				2	Maintenance Dept
Pitch Fork				6	301B/013/454/445
Planer / Power	Stanley	142		1	Carpentry Shop
Planner	Rockwell	RC63		1	Carpentry Shop
Plasma Cutter	Pakmaster	75XLP	998552	1	301
Plasma Cutter	L-Tec	PCM-VPI	A93P-33474	1	426, Rm 119
Plier Set				1	Maintenance Dept
Pliers - Channel Lock - 16"				2	CHP/WWTP
Pliers - Channel Lock - Assorted				1	010A, 010B
Pliers set 5 pc.				1	CHP/WWTP
Pliers set 9 pc.				1	CHP/WWTP
Plow Blade	Kwik Way	3512600-A	7448-139	1	301
Plow Blade	Bobcat	96 Snow Blade	683801574	1	446
Plow Kit	Meyer	ST 7.5 bid/E47 pmp		1	301
Plow Kit	Meyer	ST9.0bid/E47 pump		1	301
Plow Kit	Meyer	C8 blade/E47 pump		1	454
Plow Kit	Meyer	HM10 bid/E60 pump		5	454
Plow Kit	Meyer	HM 10		1	454
Plow Kit	Meyer	HM 10		3	454
Pneumatic Calibration Kit				1	Refrigeration Shop
Pneumatic Repair Kit				1	Refrigeration Shop
Pneumatic Tester Cabinet				1	A/C Shop
Pole Driver				4	301B/013/454/445
Pole Pruner				3	301B/013/454/445
Poly Sprayer				1	Refrigeration Shop
Pop-rivet Gun				2	A/C Shop
Post Hole Digger				3	301B/013/454/445
Power Broom	Shindaiwa		8052694	1	013
Power Broom	Shindaiwa		8011559	1	301
Power Broom	Shindaiwa		6007284	1	301
Power Chip	Franklin	10HP	152040910	6	310
Power Chip	Franklin	15HP	152040913	6	310
Power Chip	Franklin	20HP	152040912	6	310

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Power Chip	Franklin	30HP	152040926	6	310
Power Pruner	Echo		24239	1	301
Power Supply	Condor	HAZY-0-5AT	23033	1	310
Press	CIA	2320		1	301
Press	Murphy	H30JG	5380	1	445
Pressure Washer	North Star	157223A	157223-079856	1	013
Pressure Washer	Honda	11HP		1	218
Pressure Washer	North Star		157223-079856	1	301
Pressure Washer	R+D		73705	1	445
Pressure Washer	Aaladin	1350		1	454
Pressure Washer	Hotsey	HC 165A	4618	1	513A
Pressure washer				1	CHP/WWTP
Prybar				1	Refrigeration Shop
Psychrometer Set				2	A/C Shop
Pull Cable				1	513A
Pull Tape - Electric				1	010A, 010B
Pullers - Misc.				30	301B/013/454/445
Pump - Portable	Crown	4"		1	218
Pump 530 gpm 7.5 H.P.	Pumpex	5224	A3018	1	EFF Pump Station
Pump Sprayer				2	A/C Shop
Punch	Rotex	18	4706105	1	426, Rm 119
Punch Set				1	010A, 010B
Push Cart - Plastic - 6 ft				1	010A, 010B
Push Cart - Wooden - 5 ft				1	010A, 010B
Putty Knife - Assorted				1	010A, 010B
Radial Arm Saw		14"		2	Carpentry Shop
Radial Arm Saw		20"		1	Carpentry Shop
Radiometer - UVX Digital		UVX-36, UVX-25	31113, 12537, 10729	1	Safety Department
Ram-set				1	Electrical Shop
Receiver	Subtrol	5G94	152200951	1	310
Receiver Controller Calibration Kit				1	A/C Shop
Recovery System - Freon				6	Refrigeration Shop
Recovery Tank - Freon				9	Refrigeration Shop
Refrigerant Gauge Set				7	Refrigeration Shop
Refrigerant Leak Detector	Snap-on			1	A/C Shop
Refrigerant Manifold Hose Set				6	A/C Shop
Refrigerant Recovery Machine				1	A/C Shop
Refrigerant Recovery Unit		VR11	106372	1	010A, 010B
Refrigerant Scale				1	A/C Shop
Refrigerant Scale / Charging Set				1	A/C Shop
Refrigeration Scale -				1	Refrigeration Shop

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Electronic					
Refrigerator	Roper			1	513
Refrigerator				1	CHP/WWTP
Regulator	Clz	W + T	BC20999	1	310
Regulator				1	Refrigeration Shop
Regulator - Acetylene				2	A/C Shop
Regulator - Nitrogen				1	A/C Shop
Regulator - Oxygen				4	A/C Shop
Regulator Regal	Clz	210	B03284	1	310
Roll forming Mech.	Engel	M-825	1172-01	1	426, Rm 119
Roller Hand - 3 ft	Pexto	416-E		1	426, Rm 119
Rotation Tester				1	Electrical Shop
Safe - Arms				1	513
Safe - Pyrotechnics				1	513
Safety Equipment				1	Refrigeration Shop
Sandblaster	Skat Cat		S.A.25094	1	426, Rm 119
Sander - Oscillating Spindle				1	Carpentry Shop
Sander / Belt	Milwaukee	5936		1	Carpentry Shop
Sander 7" HD	Rockwell	470		1	Carpentry Shop
Saw - ¼ Worm Drive	B & D	978 8		1	Carpentry Shop
Saw - ½Trim	Rockwell	314 4		1	Carpentry Shop
Saw - Block 12"	Partner			1	Carpentry Shop
Saw - Brick 14" table				1	Carpentry Shop
Saw - Chop	Milwaukee			1	Maintenance Dept
Saw - Circular	Dewalt			1	010A, 010B
Saw - Circular				1	Electrical Shop
Saw - Circular 7 ¼	Dewalt			1	Carpentry Shop
Saw - Circular 7 ¼	Miller Falls	M800		1	Carpentry Shop
Saw - Concrete	Sthil	TS400	155447449	1	454
Saw - Electric 7 ¼	Dewalt			1	Carpentry Shop
Saw - Miter 10"	Ryobi	251U		1	Carpentry Shop
Saw - Reciprocating				1	Electrical Shop
Saws-all	Milwaukee			1	010A, 010B
Saws-all				2	301B/013/454/445
Saws-all	Black and Decker			1	A/C Shop
Saws-all	Milwaukee			1	A/C Shop
Saws-all				1	A/C Shop
Saws-all	Milwaukee			4	CHP/WWTP
Saws-all				2	Maintenance Dept
Saws-all 18V		Milwaukee		2	Bldg. 426, Rm. 119A
Saws-all HD	Milwaukee			1	CHP/WWTP
Scaffolding with leveling legs, platforms and safety rails				3	218

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Scale				1	513
Scale - Digital				1	Refrigeration Shop
Scale - Electronic				1	Refrigeration Shop
Scale - Refrigerant				1	Refrigeration Shop
Scale - Regular Weight				1	Refrigeration Shop
Scale CPS (CC-100)				2	Refrigeration Shop
Screw Extractor Set				1	A/C Shop
Screwdriver - Assorted				1	010A, 010B
Screwdriver - Assortment				1 box	A/C Shop
Screwdriver - Rechargeable	Dewalt			2	CHP/WWTP
Screwdriver Set				1	Maintenance Dept
Screwdriver Set - 6 Pce				2	A/C Shop
Screwdriver set 21 pc.				1	CHP/WWTP
Seat repair Kit				1	Bldg. 426, Rm. 119A
Seeder	Lesco		WRI1387	1	013
Seeder	Jacobson		82548-5517	1	013
Seeder	Jacobson	548100	82548-2855	1	030
Sensor, pH and ORP	Foxboro	871A-2F-7	AE-540	1	Water Plant
Sensor, Ultrasonic	STI	385-1E00-006	LE-206	1	Water Plant
Serviceman combustion analyzer	Bachrach			1	CHP/WWTP
Sewage pump - norv-clog submersible	Fairbanks Morse	54314-4"	K3X1-022656	1	289-storage garage
Shaper - Floor Mount				2	Carpentry Shop
Sheers				3	301B/013/454/445
Shop Vacuum	Rigid	5.25HP/16 Gal		1	013
Shot-Gun Stick - Fiberglass				1	Electrical Shop
Shovel				4	513A
Shovel - Flat				10	301B/013/454/445
Shovel - Round				20	301B/013/454/445
Sidewalk Edger	Tanaka		N112679	1	013
Sidewalk Edger	Tanaka		PO56584	1	013
Sidewalk Edger	Little Winder		267562	1	301
Sidewalk Edger	Tanaka		P056767	1	301
Sight Glass - Electronic - A4000				1	Refrigeration Shop
Silage Fork				6	301B/013/454/445
Silage Scoop				15	301B/013/454/445
Sledge Hammers				6	301B/013/454/445
Snow Shovel				15	301B/013/454/445
Snow Thrower	White		2G12586000	1	013
Snow Thrower	Toro	624	8001992	1	301
Snow Thrower	White		1J116B40081	1	301
Snow Thrower - 56"	John Deere		M02754X150136	1	301

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Socket Set - 1/2" 10 to 28 mm				3	A/C Shop
Socket Set - 3/8" 9 to 19 mm				1	A/C Shop
Socket Set - 1/2" - 10 to 28 mm				3	A/C Shop
Socket Set - 1/2" - 15/16 to 1 1/8				2	A/C Shop
Socket Set - 1/2" - 9/16 to 7/8				1	A/C Shop
Socket Set - 1/4"				1	010A, 010B
Socket Set - 1/4" 6 to 14 mm - Deep				1	A/C Shop
Socket Set - 3/4"				1	A/C Shop
Socket Set - 3/8"				1	010A, 010B
Socket Set - 3/8" - 10 to 19 mm				1	A/C Shop
Socket Set - 3/8" - 3/8 to 7/8 - Deep				2	A/C Shop
Socket Set - 3/8" - 4 to 10 mm				1	A/C Shop
Socket Set - Combination 85 Pce				1	A/C Shop
Socket Set - Metric				3	Refrigeration Shop
Socket Set 1/2"				3	Refrigeration Shop
Socket Set 1/4"				6	Refrigeration Shop
Socket set 27 pc. 3/8"				1	CHP/WWTP
Socket Set 3/8"				6	Refrigeration Shop
Sod Cutter	Ryan		111126	1	013
Sofa				1	513
Soldering Gun				2	A/C Shop
Soldering Gun - Electric		RT175		1	426, Rm 119A
Solomat Meter				1	A/C Shop
Soot Master - Large				1	A/C Shop
Soot vac boiler tube cleaning machine				3	CHP/WWTP
Soot-vac vacuum cleaner				3	CHP/WWTP
Sound Analysis System		Octave band analyzer 1933	3777	1	Safety Department
Sound Level Measuring Set		Meter 1565-B Calibrator - 1562-A	35732	1	Safety Department
Sound Level Measuring Set		Meter GR 1565-B	22264	1	Safety Department
Sound Level Meter			3777388027, 412585	1	Safety Department
Space heater		110,000 BTU		1	Carpentry Shop
Spade				8	301B/013/454/445
Spray Bottle	Chapin	2179		1	010A, 010B
Spray paint set / canister	Speedaire			2	CHP/WWTP
Sprayer - Liquid	Agrotec		8695	1	301

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Spreader	Vicon		754006668	1	013
Spreader	Vicon		7540421880	1	301
Spreader	EZ8	VTs-804-96	5158	1	454
Spreader	EZ9	VTs-802-96	406	1	454
Spreader				3	301B/013/454/445
Stapler / Crown	Porter-Cable			1	Carpentry Shop
Steamer - Portable	Jenny			1	CHP/WWTP
Stove				1	513
Straw Shooter	Reinco	TM730XA	1038	1	454
Street Broom				10	301B/013/454/445
String Trimmer	Sthil	PAS2601	1163	1	013
String Trimmer	Sthil	SRN2400	608019	1	013
Stump Grinder	Race	RG1665AC	8270736	1	301
Sump Pump	Echo	WP1000	507546	1	013
Sump Pump	Homelite	AP125	HR0610406	1	301
Super Freezer	Ridgid	SF-2000		1	426, Rm 119A
Sweepster	Briggs and Stratton		152016	1	013
Sweepster	Briggs and Stratton		152017	1	301
Table				1	513
Table Saw	Delta	88-045	93H22820	1	454
Table Saw 10"				1	Carpentry Shop
Table Saw 16"				1	Carpentry Shop
Tachometer				1	Electrical Shop
Tachometer - Electronic				2	A/C Shop
Tamper	Ground Thumper			1	448
Tamper	Sakai	PC800	10988	1	454
Tap & die set				1	Carpentry Shop
Tap & die set 1/8" - 1/2" NC/NF				1	Refrigeration Shop
Tap and die set	Greenfield			1	CHP/WWTP
Tap and Die Set				1	Maintenance Dept
Tap and Die Set - 1/2"				1	A/C Shop
Tap and Die Set - 1/2"				1	A/C Shop
Tape Measure - 25'				9	Maintenance Dept
Telephone	AT&T	MLS-12D		4	513
Telephone	AT&T	MLS-12D		1	513A
Temperature / Humidity Recorder				2	A/C Shop
Temperature Meter - Digital				1	Refrigeration Shop
Temperature Recorder				1	Refrigeration Shop
Tester				2	Refrigeration Shop
Thermal Detector				1	Electrical Shop
Thermo Anemometer, Micro Printer		8565, 8525, 8570, 8575	5093, 4274	1	Safety Department

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Thermo Anemometer, Micro Printer			4422, 12408	1	Safety Department
Tiller	Atlas		522471	1	301
Tiller Attachment	John Deere	550	M00550X165032	1	301
Tire Balancer	Sun	1742-0	011422218RAD	1	446
Tire Machine	Costs	40-40A	67677	1	446
Tire Machine - Hand				2	301B/013/454/445
Tire Plug Kit				4	301B/013/454/445
Titration - Digital	Hach		16900-01	1	310
Tool Chest	Craftsman			1	513A
Tool Chest - Mechanic's Rolling	Wright Tool			2	CHP/WWTP
Tool Set - Mechanic				6	301B/013/454/445
Tool Set - Technician				1	Maintenance Dept
Tools - Assorted				1	CHP/WWTP
Tools - Assorted				1 Set	513A
Top Dresser	Mill Creek	75TD	TD3234	1	030
Torch				2	301B/013/454/445
Torch - Oxygen / Acetylene System				1	A/C Shop
Torch - Oxygen / Acetylene System				9	Refrigeration Shop
Torque Wrench				2	A/C Shop
Tractor	Gravely	20-G	5JUBT101731000282	1	310
Trailer	Centreville Manual			1	CHP/WWTP
Trailer - 6x12	Centreville			1	310
Trailer - Dual axle with fuel tank				1	218
Transmitter, d/p Cell	Foxboro	IDP10-I22C21F-Z1M2	DPTI-310, 320, 330, 340, 350, 360	6	Water Plant
Transmitter, Gauge Pressure	Foxboro	IGP10-I22D1F-Z1M2V3	PIT-610, 620, 630, 309	4	Water Plant
Transmitter, Magnetic Flow	Foxboro	IMT25-SDADB10Z-AB	FIT-311, 321, 331, 341, 351, 361	6	Water Plant
Transmitter, Ultrasonic	STI	341-0442-100	LIT-206	1	Water Plant
Traps	Havchat			5	513
Trash Cans				12	513
Trash Pump	Honda	6X120		1	448
Trash Pump	Homelite	AP220-C	HT2460326	1	454
Trench Safety Shore				2	448
Trimmer	Echo	SRM2400	3495	1	013
Tripod Stand				2	513
Tube Bender - 1/2				1	010A, 010B

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Tube Bender - 3/4				1	010A, 010B
Tube Bending Set				2	A/C Shop
Tube Cutter				1	010A, 010B
Turbidimeter, Low Range	Hach	1720 (44000-10)	AE/AIT-550	1	Water Plant
Turbo Torch				5	A/C Shop
Underground Cable Detector				1	Electrical Shop
UTR	Plowe Set	ST 7.5 bid/E47 pmp		1	301
UV Bulbs				2 boxes	CHP/WWTP
UV Lamps				2 boxes	CHP/WWTP
Vacuum	Trac	880	13121	1	030
Vacuum	Giant	1901CE	95251276	1	301
Vacuum - Wet/Dry				1	Maintenance Dept
Vacuum - Wet/Dry	Snap-on	YA1001		1	445
Vacuum - Wet/Dry - 1 gallon				3	Refrigeration Shop
Vacuum Cleaner	Craftsman			1	010A, 010B
Vacuum Cleaner				2	Refrigeration Shop
Vacuum Cleaner - Small				1	A/C Shop
Vacuum Pump	Ritche Yellow Jacket	5 cfm		1	010A, 010B
Vacuum Pump				7	Refrigeration Shop
Vacuum Pump - Used				4	A/C Shop
Valve wrench 24"				1	CHP/WWTP
Velometer		6000		1	Safety Department
Velometer		Junior		1	Safety Department
Versa Plane	Rockwell	653		1	Carpentry Shop
Vibrator - magnetic	Syntron	W-20RC	GPMG12742	1	310
Vise - Bench				10	301B/013/454/445
Vise - Table - 6"				1	010A, 010B
Vise grip set 6 pc.				1	CHP/WWTP
Volical				1	A/C Shop
Volt / Ohm Meter				1	Electrical Shop
Voltage Calibrator	Davis			2	A/C Shop
Voltage Tester				2	Maintenance Dept
Voltage Tester - 15 kV				1	Electrical Shop
Voltmeter	Fluke	T5-6000		1	010A, 010B
VOM				1	Refrigeration Shop
VOM				1	Refrigeration Shop
Wall Ent. Grinder	Blade	RBG-1012-C		2	301/013
Washer - Combo	Steam Jenny	1223-C		1	218
Washer / Dryer	Whirlpool / Maytag			1	513

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Water tank - 500 gal			125-4648	1	013
Water tank - 500 gal			125-1119	1	454
Water tank - 500 gal			125-1111	1	454
Way Brush Machine				1	A/C Shop
Weedeater	Echo	2400	608105	1	013
Weedeater	Echo	3800	39019	1	013
Weedeater	Echo	3800	39471	1	013
Weedeater	Echo	3800	39028	1	013
Weedeater	Echo	3800	29987	1	013
Weedeater	Echo	4000	4840	1	013
Weedeater	Echo	SRM-2400	678175	1	301
Weedeater	Echo	SRM-2400	678250	1	301
Weedeater	Echo	2100	136297	1	301
Weedeater	Echo	2100	198555	1	301
Weedeater	Echo	2400	211152	1	301
Weedeater	Echo	2400	225688	1	301
Weedeater	Echo	3800	22663	1	301
Welder	Miller	Millermatic 250X	LA297220	1	301
Welder	Peer Spot	P55	3240	1	426, Rm 119
Welder - MIG	Century			1	CHP/WWTP
Welder - Mig-Wire Feed	Century 200	Century 200		1	218
Welder - Arc	Lincoln	250-250	AC513836	1	454
Welder - Mig	L-Tec	MM25C Master 250	B93H36739	1	426, Rm 119
Welder - Stick & Tig	Square Wave	LINCOLN 355	U1930411642	1	426, Rm 119
Welder Generator		BOBCAT 250 NT		1	Weld Truck
Wet / Dry Vacuum - 32 Gallon	Craftsman			1	010A, 010B
Wet / Dry Vacuum				1	A/C Shop
Wet/Dry Vacuum		4TR21		2	Bldg. 426, Rm. 119A
Wet/Dry vacuum		5U3000		1	Bldg. 426, Rm. 119A
Wheelbarrow				4	301B/013/454/445
Whirling or Aspirated Hygrometer				1	Safety Department
Winch Cable				1	513A
Wire Puller				1	Electrical Shop
Wire Snake	Ridgid	K-50	VP81824	1	426, Rm 119A
Wire Snake				1	Refrigeration Shop
Wire Stripper				4	Maintenance Dept
Wood Carver	Kimbel			1	Carpentry Shop
Work Table - wooden				1	010A, 010B
Wrench - 1" Impact Electric				1	Maintenance Dept
Wrench - 3/4" Impact				1	Maintenance Dept
Wrench Set - 5/16 to 11/16				1	A/C Shop
Wrench Set - Hex				1	010A, 010B

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Wrench Set - Metric				1	010A, 010B
Wrench Set - Metric 7 to 19 mm				2	A/C Shop
Wrench Set - Metric Combo 10 Pce				1	A/C Shop
Wrench Set - Open End / Box End				1	010A, 010B
Wrenches - Open end - 1/4" - 1"				2 Sets	Refrigeration Shop
Wrenches / Open End				1 Set	Carpentry Shop
USNA					
Air compressor	Speed	1WD86		1	USNA Bldg# 12
Band saw		20-1		1	USNA Bldg# 12
Band saw	Wilton	32990		1	USNA Bldg# 12
Battery Charger		5015		1	USNA Bldg# 12
Belt Sander	Porter Cable	362VS		1	USNA Bldg# 12
Blade Sharpener				1	USNA Bldg# 12
Blower - Backpack leaf blower	Echo	400, M412	3952	1	Shops - DC campus
Blower - Leaf blower	Barnton	BLBP21-8BSB	BL0033	1	Shops - DC campus
Blower - Leaf blower	Little Wonder	190402	85072610	1	Shops - DC campus
Chainsaw	Echo			2	Shops - DC campus
Cutter - Rotary Cutter	Woods	D80	4601	1	Shops - DC campus
Disc Sander	Craftsman	113225900		1	USNA Bldg# 12
Drill Press	Rockwell	15		1	USNA Bldg# 12
Edger	Goodall	G760-3B	JJG7605327	1	Shops - DC campus
Generator	Homelite	176b140	HHJ0550430	1	Shops - DC campus
Generator	Homelite	174A27-1	5430	1	Shops - DC campus
Grinder		A600071/83682		1	USNA Bldg# 12
Hammer Drill	Hilti	TE14		1	USNA Bldg# 12
Hydraulic Lift Rotary		PAUSE7		1	USNA Bldg# 12
Hydraulic Press - 20 Ton		1824OTE		1	USNA Bldg# 12
IG Frame Nailer	Grizzly			1	USNA Bldg# 12
Jigsaw	Milwaukee	6256		1	USNA Bldg# 12
Jigsaw	Black&Decker	3157		1	USNA Bldg# 12
Log Splitter		LX-200	847	1	Shops - DC campus
Mower	Hustler	923292	3572277	1	Shops - DC campus
Mower	Jacobsen	T422D	66132-4097	1	Shops - DC campus

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Mower - Walkbehind	Gravely	566	283245	1	Shops - DC campus
Mower - Walkbehind	Gravely	5260	387017	1	Shops - DC campus
Multi-Tool	Dremel			1	USNA Bldg# 12
Parts Cleaner		174R		1	USNA Bldg# 12
Planer - 15"		G1021		1	USNA Bldg# 12
Planner - 3/2	Bosch	1594k		1	USNA Bldg# 12
Pump - Trash Diaphragm	Homelite	1-1DP31	H1120084	1	Shops - DC campus
Pump - Trash Pump	Homelite	3 HP	62989	1	Shops - DC campus
Router - HD	Black&Decker	2720		1	USNA Bldg# 12
Router - Plunge	Black&Decker	7615		1	USNA Bldg# 12
Sander	Porter Cable	330		1	USNA Bldg# 12
Saw - 12"	Dewalt	790		1	USNA Bldg# 12
Saw - 12"	Dewalt	DW708		1	USNA Bldg# 12
Saw - Circular 7 1/4"	Milwaukee	6369		1	USNA Bldg# 12
Saw - Table 10"		OTS-10JF		1	USNA Bldg# 12
Saws-all	Milwaukee	6507		1	USNA Bldg# 12
Snow Blower	Hustler	920504	875662	1	Shops - DC campus
Sod cutter	Ryan	JR3	513669	1	Shops - DC campus
Spade - self-propelled tree spade	Vermeer	S-25	390	1	Shops - DC campus
Sprayer - Backpack	Solo	425		1	Shops - DC campus
Spreader - Push	Cyclone	B3-PRO		1	Shops - DC campus
Spreader - Sand	Henderson Chief	FSP-8	3200	1	Shops - DC campus
String Trimmer	Echo	SRM-2502		1	Shops - DC campus
Striper	Fox Valley System		3700144	1	Shops - DC campus
Tamper - Power tamper		GT6	701870	1	Shops - DC campus
Thermometer - Long Stem				1	Shops - DC campus
Tiller - roto tiller	Ariens	M905018	1756	1	Shops - DC campus
Tiller - roto tiller	Ariens	M901018	1780	1	Shops - DC campus
Tire Changer (Ranger) (November)				1	USNA Bldg# 12
Tire Changer(Coals)		1010		1	USNA Bldg# 12
Tire Changer(Mini)		R10SZTC		1	USNA Bldg# 12
Vacuum System - Industrial	Grizzly	8823037		1	USNA Bldg# 12

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Weed Trimmer	Echo	SRM-3000,002978	27462	1	Shops - DC campus
Weed Trimmer	Echo	SRM-3000,003067	27430	1	Shops - DC campus
Welder Air Products				1	USNA Bldg# 12
Woodchipper	Vermeer	1250BC	1VRC14134L 1001998	1	Shops - DC campus
NAL					
Air Compressor - Portable				1	NAL Maintenance
Band saw				1	NAL Maintenance
Box Brake	Bacharach			1	NAL Maintenance
Combustion Analyzer					NAL Maintenance
Dollies				1	NAL Maintenance
Drain Cleaning Machine - Large				1	NAL Maintenance
Drain Cleaning Machine - Small				1	NAL Maintenance
Drill Press				1	NAL Maintenance
EMT Bender Set					NAL Maintenance
Flatbed Hand Truck				1	NAL Maintenance
Gear Puller Set					NAL Maintenance
Hand Tools - Electrical - Misc.					NAL Maintenance
Hand Tools - Misc.					NAL Maintenance
Hand Truck		20 Ton		1	NAL Maintenance
Hydraulic Press					NAL Maintenance
Ladders				1	NAL Maintenance
Leak Detector - UV	Genie	Manual		1	NAL Maintenance
Lift System	Genie	Electric - 30 ft		1	NAL Maintenance
Lift System				1	NAL Maintenance
Motor Lift				2	NAL Maintenance
Pallet Jack				1	NAL Maintenance
Pipe Threading Set					NAL Maintenance
Plumbing Tools - Misc.		4 ton		2	NAL Maintenance
Port-a-Power Set					NAL Maintenance
Power Tools - Misc.		Cold Water		2	NAL Maintenance
Pressure Washer		Hot Water / Steam		1	NAL Maintenance
Pressure Washer				1	NAL Maintenance
Radial Arm Saw				1	NAL Maintenance
Refrigerant Recovery System - Large				1	NAL Maintenance
Refrigerant Recovery System - Small					NAL Maintenance
Refrigeration Tools - Misc.		15 ft		1	NAL Maintenance
Scaffolding System		5 ft Roll-About		1	NAL Maintenance
Scaffolding System				1	NAL Maintenance
Shear Press				5	NAL Maintenance
Shop Vacuum					NAL Maintenance

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Testing Equipment - Boiler - Misc.					NAL Maintenance
Testing Equipment - Electrical - Misc.				2	NAL Maintenance
Tool Chest / Cabinets				3	NAL Maintenance
Torch Set	Goodway			1	NAL Maintenance
Tube Cleaner Machine				1	NAL Maintenance
Vacuum Cleaner - Soot				2	NAL Maintenance
Vacuum Pump				1	NAL Maintenance
Welder - Large				1	NAL Maintenance
Welder - Small				1	NAL Maintenance
Welder - Spot				4	NAL Maintenance
Work Stations - Portable				4	NAL Maintenance

APPENDIX E3: GOVERNMENT FURNISHED VEHICLES AND HEAVY EQUIPMENT

**THIS TABLE IDENTIFIES ALL GOVERNMENT VEHICLES AND HEAVY EQUIPMENT
OFFERED TO THE SERVICE PROVIDER.**

Type of Vehicle / Equipment	YR / MFG	Serial #	ID #	Tag # / Location
BARC				
Accur Shear	625010	2875	35796	Plumbing
ATV	Polaris	4XACH50A4VA17696	35704	
ATV	Polaris	2993027		W968144
Backhoe	FMC	USA214SMCRE413204		Carpentry
Backhoe	JCB	T5BT2099/350746/7	32874	
Backhoe	John Deere	TQ4219DT008	38263	
Boat - Row	Ouachita	396301		
Bobcat / Skid Loader	New Holland	5279998 MODEL 775		Carpentry
Bobcat / Skid Loader				Electrical
Bulldozer	Case	79689	32874	
Bulldozer	Cat	75E-1585-VSA08E	26696	
Bulldozer	Cat	75E868	27395	
Cart - ATV	Custom			
Excavator	Bobcat	562314774	35431	Plumbing
Forklift				Electrical
Forklift	Clark			
Gator	John Deer	W004X2X014653	33604	
Jeep / SUV	Jeep	1JCCM88E4FT120115	31107	A231226
Jeep / SUV	96 Jeep		51517	A272328
Loader	John Deere	DW544GD544499	33086	
Loader	John Deere	256748T	26785	
Mighty Mits	Mitsubishi	V15LQ8PD22M	33878	
Mower	Alamo A415	10800		
Mower	Hustler	5068	34912	
Mower	Hustler	6204137	35247	
Mower	Hustler	98860	31352	
Mower	Hustler	8204987	33909	
Mower	Hustler	6203739	32143	
Mower	Hustler	8068544	32874	
Mower	Hustler	8146	36039	
Mower	Hustler	2124004	38049	
Mower	Hustler	6090740	32874	
Mower	Hustler	6091993	32874	
Mower	Hustler	7198860	33482	
Mower	Hustler	1568	33604	
Mower	Hustler	5872810	31048	
Mower Tractor	John Deere	LV0855D181355	35339	
Mower Tractor	John Deere	LV0855D183778	35521	
Mower Tractor	John Deere	M0085C10930	32933	
Mower Tractor	John Deere	M00855C5010		

Type of Vehicle / Equipment	YR / MFG	Serial #	ID #	Tag # / Location
Road Grader	Huber	N/A	24929	
Road Tractor	GMC	TJ1905V63060	29221	
Roller	Galion	327835	28734	
Roller	Mauldin	774-A-14CSGZYC-00774	36861	
Scissor Lift				Electrical
Sedan	Dodge	1P3BP26C2FF228315		A224077
Sedan	97 Ford		52132	A272343
Sedan	91 Chevrolet	1G1LT54G9LY213195		A298835
Sedan / Economy	Dodge	1B3XA46VXPF528966	33970	A286694
Sedan / Economy	94 Ford		72112	A272377
Sedan / Economy	94 Ford		72116	A272381
Sedan / Station Wagon	Chevy	1G1AW8J623392	38294	A239440
Skid Steer	Bobcat	508619972	35431	
Skid Steer	Bobcat	523211590		
Tailgate	Chevy	1GBHC34K7PE227159		Carpentry
Tractor	Masey-Ferguson	255	9A302398	AG0002161941
Tractor				Electrical
Tractor	John Deere	L06200P207605	35582	
Tractor	John Deere	L02355G711702	33270	
Tractor	John Deere	M0107A002191	32874	
Trailer		1P9U820D6NL016367		A29883
Trailer	Tag-A-Long	5107D0 MODEL #100		Carpentry
Trailer	Army	5180-00-289-9569		PKT 290
Trailer		1C9AD2S2XJG099271		
Trailer		1P9U820D9NL016368		
Trailer			31138	
Trailer / Low-boy				Electrical
Trailer / Pole				Electrical
Trailer Cargo		4U01C08181A001677	36526	A298812
Trailer Water Jet	Spartan	XL9BP081X5G00902	33970	A272338
Trailer-30200GVWR	Tag-A-Long	1C9AT3224U1193016		Carpentry
Trencher				Electrical
Truck / 1 ¼ton Utility	Chevy	1GCG034J2GF367917	31413	A298825
Truck / 1 Ton Utility	Ford	1FDXF47903ED20221	37681	A310954
Truck / Auger	95 International	1HTSCAANGSH211579	AG0002473029	A272309
Truck / Box	Ford	1FDWF80C5TBA18790	35065	A257654
Truck / Bucket	94 International	0794U1394	AG0002472121	A272390
Truck / Bucket				Electrical
Truck / Bucket	81 GMC	T17DGAV593703	AG0002162104	Electrical
Truck / Bucket	GMC	T17DFAV6097321	29495	A272387
Truck / Crane				Electrical
Truck / Dump	Dodge	1B6MD34W1FS691126		Carpentry
Truck / Dump	Dodge	3B6MC36S7XM534055		Carpentry
Truck / Dump	Ford	1FDXF80C2TVA18766		Carpentry
Truck / Dump Large				Electrical
Truck / Flat Bed	International	1HSLCHYLXGHA23244	31444	A298819

Type of Vehicle / Equipment	YR / MFG	Serial #	ID #	Tag # / Location
Truck / Large Dump	International	1HTLOXN7EHA66712	30956	A225480
Truck / Large Dump	International	1HT1 CHX8EHA67464	30956	A225481
Truck / Large Dump	International	1HTLDTVLXKH630282	32143	A239438
Truck / Large Dump	Ford	1FDZ090X8TVA17418A V		A257656
Truck / Large Dump	Ford	1FDXF80E2WVA12990	35643	A286705
Truck / Large Dump	Ford	1FDXF8DE7WVA13004	35612	A286712
Truck / Pickup	81 Dodge	1B7HM16YSMS287081	AG0002754187	A173712
Truck / Pickup	Chevrolet	1GCDC14D2CF353336		A216820
Truck / Pickup	Chevy	1GCDC14D6DF349582	38294	A216832
Truck / Pickup	Chevy	2GFK29HXL1207111	32964	A250833
Truck / Pickup	90 Dodge		51514	A257658
Truck / Pickup	93 Chevrolet	1GCFK24HOPE214645	AG0002471153	A263997
Truck / Pickup	95 Chevrolet		73027	A272307
Truck / Pickup	95 Ford	123K4742579957	34881	A272313
Truck / Pickup	Dodge	3B7KF23WOTM189088	35247	A272337
Truck / Pickup	Chevy	1 GCCS14Z5M2285603	35551	A286699
Truck / Pickup	Chevy	1GCHD34J7FF438211	31048	A286711
Truck / Pickup	Dodge	1 B7GG26YOLS606981	35339	A286720
Truck / Pickup	Chevy	1 GCGD34JXGE342439	31138	A291500
Truck / Pickup	Chevy	1GCGD34JXGF410903	31413	A298807
Truck / Pickup	Chevy	1 GCGD34J5GF442836	31413	A298820
Truck / Pickup	Chevy	1000D34JOGF352896	31413	A298824
Truck / Pickup	Chevy	1 GCGD34J9GF318259		A298841
Truck / Pickup	Dodge	3D7KU28623G780607	38080	A310945
Truck / Pickup	Chevrolet	1GCHD34J6FF438197		AG0002752159
Truck / Pickup	Dodge	1B7E26X5MS292917		Carpentry
Truck / Pickup	Chevy	1GCGK24K2LE239900		Carpentry
Truck / Pickup	Dodge	1B7HC13Y6VJ616238		Carpentry
Truck / Pickup	Dodge	1B7JEZ6YZM5299662		Carpentry
Truck / Pickup	Ford	1FTEF25NXRNA72862		Carpentry
Truck / Pickup	Chevrolet	1GCFK24HXSEL07940	34820	CHP
Truck / Pickup	Dodge	1B7FE16X3KS016089	32660	CHP
Truck / Pickup	Dodge	1B7JM26Y2MS294240	33298	CHP
Truck / Pickup	Dodge	1B7JM26Y4MS294241	33298	CHP
Truck / Pickup	86 Chevrolet	1GCHD34J3HF315671	AG0002754198	Electrical
Truck / Pickup 4X4	Chevrolet	2GCFK29HIL1244726	33055	A250843
Truck / Pickup 4X4	Ford	1B7FD14H9GS064640	31048	CHP
Truck / Pickup 4X4	Ford	1FTBR11S3EVC53561	31048	CHP
Truck / Pickup 4X4	Ford	1FTCR15U1TPA78870	35125	CHP
Truck / Silage	GMC	1GTG6DIA7CV564702		A239439
Truck / Small Dump	Chevy	1GBHC34K81E24185C		A257662
Truck / Small Dump	Dodge	3B6MF3664WM243284	35916	A286726
Truck / Stake Body	Chevrolet	1GBHK34KXNE220562	33878	CHP
Truck / Stake Body	Dodge	1B7MD34W6ES348564	30682	CHP
Truck / Stake Body	Chevrolet			Refrigeration
Truck / SUV	Ford Explorer	1FMZU70E53UC05998		AG0002471329

Type of Vehicle / Equipment	YR / MFG	Serial #	ID #	Tag # / Location
Truck / Tow	GMC	1GDH6D1AGEV545867		A225484
Truck / Utility Stake	Ford	1FMCU24X0SUB46250	34820	CHP
Truck / Utility Stake	Ford	1FMCU24X4SUB46249	34820	CHP
Truck Van Wagon	Ford	1FMCA11U9KZC1370	32690	CHP
Van / Cargo	00 Dodge	2B7LB31Z6YK130669	AG0002753760	Electrical
Van / Cargo	03 Ford	V1FTNE24L63HA87772	AG0002471341	Electrical
Van / Cargo	04 Ford	1FTNE24L84HA35268	AG0002752627	Electrical
Van / HD-Chevy	Chevrolet	1GCG35K7189355	32752	CHP
Van / Passenger	89 Ford		92225	A250806
Van / Passenger	92 Dodge		70706	A263954
Van / Passenger	92 Dodge		70710	A263958
Van / Passenger	92 Dodge		70717	A263965
Van / Passenger	90 Ford		71141	A263990
Van / Passenger	93 GMC	1GKDM152ZXPB539893		A272352
Van / Passenger	Dodge	2B5WB35Y2LK788053	36342	A291478
Van / Service	Dodge	2B7HB21Y7NK147404		70720
Van / Service	86 Chevy	1GCEG25H0D7174353	30468	A224050
Van / Service	85 Chevrolet	1GCEG25H1F7204835	AG0002162344	A224086
Van / Service	89 Dodge	2B7HB21X9KK309312	AG0002282030	A239461
Van / Service	89 Dodge	2B7HB21Y3KK309315	AG0002282124	A239463
Van / Service	89 Chevrolet	1CCEG25H2K7140900		A239466
Van / Service	89 Chevrolet	1GCEG25H2K7161021		A239479
Van / Service	94 Dodge	2B7HB21YXR541260		A250822
Van / Service	93 Dodge	2B7HB21Y1RK541261	AG0002471147	A250824
Van / Service	91 Dodge	2B7HB21Y8MK441456	AG0002469184	A2576388
Van / Service	Chevy	1GBKP32K053319912	35004	A257652
Van / Service	91 Dodge	2B7HB21YXMK441457	AG0002469183	A257682
Van / Service	Dodge	123K4721429995	34029	A258023
Van / Service	92 Dodge	123K4711639963	33695	A263963
Van / Service	92 Dodge	123K4711639962	33695	A263964
Van / Service	92 Dodge	2B7HB21Y2NK147410		A263966
Van / Service	94 Dodge	2B7HB21Y2RK541267		A263992
Van / Service	Chevy	1GCEG25K3RF144207	34394	A272365
Van / Service	94 Chevrolet	1GCEG25K3RF143235	AG0002472087	A272366
Van / Service	91 Chevy	1GCEG25Z7M116376	33239	A286695
Van / Service	Ford	AG2752623		A318754
Van / Service	Chevy	1GCDG15D2D7159078		Carpentry
Van / Service	Chevy	1GCEG25K9RF143563		Carpentry
Van / Service	Dodge	2B7HB23HXEK306185		Carpentry
Van / Service	Dodge	2B5WB35Z5MK441648		Carpentry
Van / Service	Dodge	2B5WB35Z7LK747412		Carpentry
Van / Service	Dodge	2B5WB35Z7LK781690		Carpentry
Van / Service	Dodge	2B7HB21YOMK441841		Carpentry
Van / Service	Dodge	2BYH31Y1RK541258		Carpentry
Van / Service	Dodge	2B7HB1Y3RK541259		Carpentry
Van / Service	Ford	1FTNE24L43HA87771		Carpentry

Type of Vehicle / Equipment	YR / MFG	Serial #	ID #	Tag # / Location
Van / Service	Ford	1FTNE24L43HA87770		Carpentry
Van / Service	Chevrolet	1GCEG25K4RF143485	34394	CHP
Van / Service	Chevrolet	1GCEG25K6RF144055	34366	CHP
Van / Service	Dodge	2B4GB11E2CK184804	30133	CHP
Van / Service	Dodge	2B7HB21X6SK568727	34881	CHP
Van / Service	Dodge	2B7HB21YXNK147400	33695	CHP
Van / Service	Dodge	2B7HB21Y1NK147401	33695	CHP
Van / Service	Dodge	2B7HB23H5EK306191	29587	CHP
Van / Service	Dodge	2B7HB23T0FK263692	31048	CHP
Van / Service	Ford	1FTSE34L63HB11948	37773	CHP
Van / Service	GMC	1GTGG35KXSF522768	35004	CHP
Van / Service	Dodge			Refrigeration
Van / Service	Ford	1FMCA11U7KZC06153	A-253694	Bldg. 12
Van / Service	Dodge	2B4GK2538MR33097	A-257691	Bldg. 12
Van / Service	Ford	1FALP57U8RG23241	A-272378	Bldg. 12
Van / Service	Dodge	2B4FK41G0FR294941	A-262323	Bldg. 12
Van / Service	Chevrolet	JGCGG25U23118083	A-31094	Bldg. 12
Vehicle	Ford - Pick - Up	1FTHF26H35NB27860	A272308	Bldg. 307
Vehicle	Chevrolet Lumina	2G1W152KXW9299811	A286731	Bldg. 307
Vehicle	Chevrolet Lumina	2G1WL52K8W9300468	A286730	Bldg. 307
Vehicle	Ford – Explorer	1FMZU72E392UB1958	A310911	Bldg. 307
Vehicle	Ford – Bronco	1FMEU15N6SLB47053	A272317	Bldg. 307
Vehicle	Ford-Explorer	1FMZU72E02UA52846	A298828	Bldg. 307
Vehicle	Chevrolet Caprice	1G1BL5372PW134305	A263994	Bldg. 307
Vehicle	Ford Crown Victoria		A272331	Bldg. 307
Vehicle	Chevrolet Caprice	1G1BL52WOSR152284	A272396	Bldg. 307
Vehicle	Ford Crown Victoria	2FAP71W62X136225	A310907	Bldg. 307
Vehicle	Chevrolet Impala	2G1WF55K539302872	A310955	Bldg. 307
USNA				
Auger Bobcat Attachment	Lowe Manufacturing	6560170M5245	09-01-87	USNA
Backhoe For Bobcat	Melroe Clark	630002736	09-01-88	USNA
Backhoe For Bobcat	Melroe Clark	63.61138M1520	09-01-88	USNA
Backhoe Loader	John Deere	N/A	12-10-93	USNA
Blower -Snow blower	Toro	H3545598R		USNA
Bobcat Skid Loader	Melroe Clark	5019M14166	09-01-88	USNA
Bobcat Skid Loader	Melroe Clark	5037M26855	09-01-88	USNA
Bush hog Attachment	Woods Carpet	0038077	09-01-98	USNA
Concrete Mixer	Morspeed	58728		USNA
Cushman #16	Cushman	60B7938		USNA
Diesel Tractor	Kubota	L34510623	10-01-82	USNA
Diggin Dutchman Trencher	Vermeer	M220	09-15-89	USNA
Dozer	John Deere	313174T		USNA
Farm Mower/Tractor	Jacobsen	T422D	09-01-88	USNA

Type of Vehicle / Equipment	YR / MFG	Serial #	ID #	Tag # / Location
Farm Mower/Tractor	Jacobsen	T428D	09-01-99	USNA
Farm Tractor	Ford M5600	C659647	05-01-82	USNA
Forklift	Yale	E177B16730U	02-26-98	USNA
Hustler	Excel	4089800	09-15-91	USNA
Hustler #1 Mower	Excel	3872277	09-15-89	USNA
Hustler #2 Mower	Excel	3872278	09-15-90	USNA
Hustler #3 Mower	Excel	4089796	09-15-91	USNA
Hustler #4 Mower	Excel	924241	09-15-92	USNA
Hustler #5 Mower	Excel	0004040	09-15-97	USNA
Hustler #6 Mower	Excel	004800	09-15-94	USNA
Hustler #7 Mower	Excel	8100783		USNA
Hustler #8 Mower	Excel	00094113	09-29-99	USNA
Leaf Truck	GMC 010	1GDL7D1B4KV516153	09-15-89	11305
Truck / Dump	Int'l Harvester	1HTTAZPM4JH618027	06-01-88	A239455
Truck / Pickup	Dodge	HS505041	06-01-87	10352
Truck / Pickup	Dodge	1B7GL26X3PS197525	01-19-93	US12608
Truck / Pickup	Dodge	1B7HC16X015655768	09-15-01	US13404
Truck / Pickup	Ford	1FTBR10T1HUA68133	10-01-86	10164A
Truck / Pickup	Dodge Ram	1B6ME3658NS612549	04-23-92	US12041
Truck / Pickup	Ford	1FTRF27Z5WKB88100	09-15-98	US13163
Truck / Pickup	Chevy 2500	1GCFC24T8YE276846	09-15-99	US13288
Truck / Pickup	Chevy	1GCYHD34J1EF387688	04-05-93	USNA
Truck / Pickup	Ford	1FTDF15Y2RNB07460	05-03-94	12559
Top Dresser	Millcreek	3976	08-22-01	USNA
Tractor	Gravely	8167	08-01-95	USNA
Tractor Rake	Harde Williams Inc	0099-AR	09-01-00	USNA
Tram - 48 Econoline 48 Passenger	Ford	1FHHE27Y4THA81338	03-06-97	USNA
Tree Spade Bobcat Attachment	Cale Tree Systems	632	09-01-87	USNA
Vacuum - Big-T-VAC	S J Meeks	S22EV1206S001289		USNA
Vacuum - Leaf	Goossen			USNA
Van	Chevy Astro	1GCDM19W8WB15508	01-07-97	K28000
Woodchipper	Vermeer	1VRC14134L100199	01-02-91	USNA

APPENDIX E4: GOVERNMENT FURNISHED ADPE

THIS TABLE IDENTIFIES ALL AUTOMATED DATA PROCESSOR EQUIPMENT (ADPE) OFFERED TO THE SERVICE PROVIDER

Computer* - incl. monitor, keyboard, and mouse / CPU - incl. keyboard and mouse

Description	MFG	Model	Serial #	Qty	Location
Bar Code Reader	PERCON	P3032849	42-002-00	1	003, Rm. 014
Building Controller	Siemens		MBC-40-426	1	426A, Rm. 117B
Computer*		DHM	2L4X11	1	003
Computer*		DHM	3L4X11	1	003
Computer*		GP7-550	156824595	1	005
Computer*		GX270	BH3RK31	1	005
Computer*		4600	JC6CL31	1	005
Computer*		GX260	09D244	1	011
Computer*		2000	36226T9	1	013
Computer*		5166	78KX5	1	013
Computer*	Dell	Dimension 4100		1	218
Computer*		5D380	37675	1	301
Computer*		P5-133	5289180	1	301
Computer*	Dell	Dimension 4100	CDLF401	1	426
Computer*	Dell	Optiplex GX400	7RBHW01	1	426
Computer*	Gateway	E-4200 1BRE 4200450	15840969	1	003, Rm. 014
Computer*	Gateway	900 MHz	22956988	1	003, Rm. 014
Computer*	Dell	Pentium 4 Dimension 8200	5K8KY01	1	003, Rm. 116
Computer*		GX110	9CKC201	1	003 Rm 314
Computer*	IBM	New Vista X86 Family 6 / 8	2179750 FK00NDO	1	003, Rm. 117
Computer*	IBM	New Vista X86 Family 6 / 8	2179750 KF00M25	1	003, Rm. 117
Computer*	Dell	F1\$WD		1	007 Mech Room
Computer*		4550	9PHC321	1	301B
Computer*		EV700		1	426A
Computer*	Gateway	EV500		1	426A
Computer*	Dell			1	426A
Computer*	Gateway	2000 VIVITRON 21		1	426A
Computer*	Micron	Pentium III 700MHz/2000	2204385-001	1	NAL
Computer*	Micron	Pentium III 866MHz/98SE	28465530001	1	NAL
Computer*	Micron	Pentium 4 1.8GHz/Win2000	31163010001	1	NAL
Computer*	Compaq	GP7-750		1	USS Wastewater
Computer*	Dell	Dimension 4100		1	USS Wastewater

Description	MFG	Model	Serial #	Qty	Location
Computer*	Compaq	EUO4000		3	USS Wastewater
Copier		3340	12QWO3438	1	301
Copier	Canon	Image Runner 5000	MPL34655	1	003, Rm. 117
CPU	Gateway	ATX Tower 2000	5055967	1	161
CPU	Gateway	TBR3600 PIII	15203199	1	230
CPU	Dell	OPTIPLEX GX300	34L5301	1	307
CPU	Dell	OPTIPLEXGX1	MMP	1	307
CPU	Gateway	CPD	T33487496	1	307
CPU	Gateway	ATX Tower 2000	6913768	1	1126
CPU	Gateway	E-3400	24544686	1	426, Rm. 119B
CPU	Gateway	GP6450	0011C48445	1	426A
CPU	Gateway	GP7-700	0017109898	1	426A
CPU	Dell	DIMENSION 8300	X0873060/00045-43-443-989917/W86FH-MYT2WC6BCWVVMJC-HT2QQ	1	426A
CPU	Gateway	E-3400	0024956628002495GG28	1	426A
CPU	Dell	DIMENSION 8300	3CJJH31	1	426A
CPU	Gateway	GP7-600	0015196627	1	426A
CPU	Gateway	P4	0022089881	1	426A
CPU	Gateway P2	LP MINI TOWER TB3 GP7-700	0017109897	1	426A
CPU	Gateway	NLXMIO TOWER C02E3400	0024956626	1	426A
CPU	Gateway	TB3GP7-700	0017109896	1	426A
CPU	Dell	DIMENSION 8200	51123Q11	1	426A
CPU	Dell	DIMENSION 8200	5F6MQ11	1	426A
CPU	Dell	DIMENSION 8200	7H23Q1	1	426A
CPU	Gateway	GP6450	0011648647	1	426A
CPU	Gateway	ATXSTFMNTE4600	0022089882	1	426A
CPU	Gateway	E3400	0024956627	1	426A
CPU	Dell	DIMENSION 8200	3H23Q11	1	426A
DDS	Xerox	8830	N5T-699316	1	426A
Fax Machine	HP	1220		1	218
Fax Machine	HP	920	MX9APCL0TT7	1	426
Fax Machine	Sharp	FO-4700	07114208	1	426A
Fax Machine	HP	6110		1	USS Wastewater
Fax Machine	HP	6110		1	USS Wastewater
Intergraph	Intergraph	TD3	HIL9XR	1	426A
Label machine / accessories	Brady	"Labelizer Plus"		1	426A
Laptop	Dell	PRECISION M50	72DHN21	1	307
Laptop	Dell	INSPIRON 7500	Y802Z	1	307
Laptop	Dell	PPS	83B597087	1	427
Laptop	Dell	TS30GI	6397346BYK1263A	1	427
Laptop	AST	Ascentia	DJKPWRE486-900N	1	427
Laptop	Toshiba	PA1207TUV	2627741	1	427

Description	MFG	Model	Serial #	Qty	Location
Laptop	Dell			1	042
Laptop (Training PC)	Dell	PPI	8390846BY14358A	1	003, Rm. 014
Monitor	Gateway	CPD1723	7306142	1	161
Monitor	Intergraph	MDSP13001	HICF200154	1	230
Monitor	Dell	17" Trinitron	7214495	1	426
Monitor	Dell	15"	04D025	1	426
Monitor	Gateway	CPD-GF200	8037941	1	1126
Monitor	Gateway	EV700	MU17026CO453403	1	426, Rm. 119B
Monitor	Dell	1703FPE	CN02V3157161838CD871	1	426A
Monitor	Micron	17"	SSAM07020100214378	1	NAL
Monitor	Micron		SSAM07020100214077	1	NAL
Monitor	Viewsonic	18" VG181	AD05025010167	1	NAL
Monitor (CRT)	Dell	TRINITRON P1110	2212623	1	307
Monitor (CRT)	Dell	ULTRASCAN	7047083	1	307
Monitor (CRT)	Gateway	VIVITRON	T33487496	1	307
Monitor (CRT)	Gateway	VX1100	803016742	1	426A
Monitor (CRT)	Dell		MX-080152-47605	1	426A
Monitor (CRT)	Gateway	VIVITRON 2000	709065966	1	426A
Monitor (CRT)	Gateway	VX1100	806033927	1	426A
Monitor (CRT)	Gateway	VX1100	803012669	1	426A
Monitor (CRT)	Gateway	VIVITRON 21	604002697	1	426A
Monitor (CRT)	Dell	D1526TX-SH	855502	1	426A
Monitor (CRT)	Gateway	VIVITRON 21	604003406	1	426A
Monitor (CRT)	Gateway	VX1100	803822302	1	426A
Monitor (CRT)	Dell	1702FP	062BHAV11BOESU	1	426A
Monitor (CRT)	Dell	OFFICEJET G55	MX08615247605273AERN	1	426A
Print/Fax		CFX-L3500F	38161	1	013
Print/Fax		5110	CN31FB12S3	1	013
Print/Fax		V40	MX273G53MT	1	301B
Print/Scan	HP	HP85	SGG14EH37V	1	426A
Print/Scan	HP	G85	SGC0410WWH	1	426A
Print/Scan/Copy	HP	6100	MY2CJC21JQ	1	426, Rm. 119B
Print/Scan/Copy		OFFICEJET 8300	SGE07E11NP	1	426A
Print/Scan/Copy	HP	OFFICEJET G55	SCG0410F55	1	426A
Print/Scan/Copy	HP	OFFICEJET G55	SGC4EG7GW	1	426A
Print/Scan/Copy	HP	LASERJET 3320 DIGITAL	062BHAV11BOE54	1	426A
Printer	HP	C14110A	USB3043539	1	003
Printer		C14110A	USB3043635	1	003
Printer	Dell	PPI	0009963T-12961-946-1656	1	003
Printer	HP	C3916A		1	005
Printer	HP		JHXE020436	1	005
Printer	HP	LASERJET 4	USFC125271	1	013

Description	MFG	Model	Serial #	Qty	Location
Printer		900CXI	MY25DICONB	1	013
Printer	HP	960C		1	218
Printer	HP	G85	SGD0510TGK	1	307
Printer	HP	OFFICEJET	MY92KC1007W	1	307
Printer	HP	960C	MX111TOFX	1	426
Printer	HP	LASERJET 2100 C4170A	USGG005744	1	003, Rm. 014
Printer	HP	LASERJET III C2001A	USGC227018	1	003, Rm. 014
Printer	HP	LASERJET 220 C7064A	69GGB6714	1	003, Rm. 014
Printer	HP	Color LASERJET 4500 C4084A	JPDD203182	1	003, Rm. 116
Printer	HP	C2003A	USCC477821	1	426A
Printer	HP	LASERJET 4L	USCC081482	1	426A
Printer	HP	DESKJET 722C	E585B1403W	1	426A
Printer	HP	OFFICEJET G55 C6734A	SGE07E0TC7	1	426A
Printer	HP	OFFICEJET R40	SGB95E0RWT	1	426A
Printer	HP	C2003A	BB689448	1	426A
Printer	HP	1120-C	SG83G120G3	1	426A
Printer		HP 822c		1	426A
Printer	Canon	5750		1	426A
Printer	HP			1	426A
Printer	HP	LASERJET 5	JPKH038090	1	NAL
Printer	Epson		ODN1107259	1	NAL
Printer	HP	LASERJET 4050	USBB111879	1	NAL
Printer	HP	5-N		1	USS Wastewater
Scanner	HP	1170CSE	EGBB84AG1K3	1	426A
Server / MAXIMO	Dell	POWEREDGE 2500	7D6CV01	1	426A, Rm. 117B
Server / Siemens	Dell	POWEREDGE 2400		1	426A, Rm. 117B
Typewriter	Swintec	7000	07306309	1	426A
Ubsourib	Dell	18100 Inspiron	32564A00	1	426
Laptop	Gateway	Solo 9550	BDC11350657	1	
Computer*	Gateway	E-3200	0015843770 / 0016264408	2	
Server	Gateway	ALR-7200		1	
Computer*	Dell	Dimensions 4600	52C8W21 / 16JST21	2	
Printer	HP	LASERJET III	3221A81201	1	
Printer	HP	LASERJET 4	USBB130175	1	
Zip Drive	Iomega 100	2100P2	RRBW40CEFT	1	
Zip Drive	Iomega 250	Z250USBPCMBP	7SDM32K07J	1	
Printer Switch	Belkin	F1B024-V		1	
Computer*	AT&T	Starstation	91TY63143532	1	
Modem - External	U.S. Robotic	Courier 2400	0030-00095346080690	1	

Description	MFG	Model	Serial #	Qty	Location
Modem - External	Hayes	5120AM	A0165120K684	1	
Computer*	Gateway			1	
Printer	NEC	LASERJET		1	
Copier/Fax	Panasonic			1	
Computer*	Dell	Optiplex GM-5133		1	
Computer*	Dell	Dimensions 4199		1	
Computer*	Dell	Dimensions 4100		1	
Computer*	Honeywell	Trwitron		1	
Monitor/Printer	Surgaurd			1	
Copier	HP			1	
Copier/Fax	Panasonic			1	
USNA					
CPU	Dell	OptiPlex GX400	2NTBW01	1	Bldg 012, Room 003C
CPU	Micron	Anchorage -233	995118-0004	1	Bldg 013
CPU	Micron	Anchorage -233	995118-0007	1	Bldg 013
CPU	Gateway	E-3200	11227807	1	Bldg 019, Room 118
CPU	NACOM		undetermined	1	Bldg 019, Room B3
CPU	Gateway	GP7-600	17487756	1	Bldg 019, Room B5
Monitor	Dell	E771p	MX-0419TG-47801-195-C0CG	1	Bldg 012, Room 003C
Monitor	CTX	VL700	1N890402177	1	Bldg 013
Monitor	Gateway	EV700 UL003-01	MIE2JA049700	1	Bldg 013
Monitor	Dell	E771p	MX-0419TG-47801-19E-H0C7	1	Bldg 019, Room 118
Monitor	Dell	D1728D-LS	04036A6L45C6	1	Bldg 019, Room B3
Monitor		CPD-17F23	7310208	1	Bldg 019, Room B5
Print/Scan/Copy	HP	OFFICEJET K80i	MY27VD6078	1	Bldg 012, Room 003C
Print/Scan/Copy	HP	OFFICEJET K80i	SG05CA208N	1	Bldg 019, Room B3
Printer	HP	LASERJET 4	JPBG007163	1	Bldg 013
Printer	HP	LASERJET 4plus	JFPB000168	1	Bldg 013
Printer	HP	LASERJET 4050	USBB103364	1	Bldg 019, Room B5
Computer*	Dell		6X6V511	1	Bldg 513
Computer*	Dell		16NWR01	1	Bldg 513
Copy Machine	Savin	9940DP	243660753	1	Bldg 513
Laminator	Tashin	TCC-160	8808480	1	Bldg 513
Paper Folder - Electric	Telko		71501	1	Bldg 513
Printer	Canon	CFX-L4500	ULR16314	1	Bldg 513
Printer	HP	LASERJET	AG0002751989	1	Bldg 514
Typewriter - Electric	IBM			1	Bldg 514

APPENDIX E5: GOVERNMENT FURNISHED TRAINING

THIS TABLE IDENTITIES ANY TRAINING OFFERED TO THE SERVICE PROVIDER

Training Name / Description	Frequency of Training
"Toolbox Talks"	
Certified Arborist training	
Chemical Hygiene Training	
Confined Space Entry	
Control of Hazardous Energy	
Federal Vehicles Standards	
Hazard Communication Training	
Hazard Tress and Tree People and the Law	
Hearing Conservation Training	
International Society of Arboriculture vendor	
Maintenance of equipment	
Nat'l Arbor Day Foundation vendor	
New Employee Orientation	
OSHA Thirty (30) hour Collateral Duty Safety Officer Training	
Personal Property F-Solutions	
Pesticide Training (State Pesticide Applicators Certification	
Respiratory Protection Training	
Safety Committee Training	
Safety Publications	
Supervisor Training	
USDA Civil Rights	
USDA Ethics	
USDA Sexual Harassment	
Use of equipment	
Worker Protection Standard)	

APPENDIX F: DEMOLITION PLAN

BARC FACILITY BUILDINGS / STRUCTURES PLAN FOR DEMOLITION FOR EACH FISCAL YEAR

Building #	Description	Est. Sq. Ft.
FISCAL YEAR 2005		
161A	Laboratory	280
163G	Scale House	80
166A	Shed	400
169	Scale House	388
176	Shed	80
186	Security Headquarter	5,210
192-1	Storage	648
194	Sewage Pumping Station	144
211	Office / Laboratory	5,878
237	Poultry House	1,965
238	Poultry House	1,965
275	Turkey Barn	890
278	Poultry House	1,250
312	Storage	3,160
470A	Laboratory w/Greenhouse	7,167
470C	Soil Storage	412
470JJ	Greenhouse	156
524	Gasoline Station	345
FISCAL YEAR 2006		
320	Office / Laboratory	5,840
321A	Walk-In-Box	156
321B	Walk-In-Box	156
322	Office	7,200
324A	Office / Laboratory	551
324B	Walk-In-Box	240
328	Laboratory	1,290
333	Office / Laboratory	412
334	Laboratory	4,600
335	Poultry House	2,604
335A	Storage	200
335B	Storage	1,320
336B	Animal Shed	130
336C	Animal Shed	130
337	Laboratory	971
338	Office / Laboratory	2,080
338A	Laboratory / Storage	1,316
338B	Animal Building	1,759
339C	Animal Shed	150
339D	Animal Research Building	5,766

Building #	Description	Est. Sq. Ft.
FISCAL YEAR 2007		
340	Barn	3,765
341R	Hog Shed	95
342	Animal Shed	95
342A	Hog Shed	175
342B	Hog Shed	175
342C	Hog Shed	175
342D	Hog Shed	175
344	Barn	2,484
357	Laboratory	1,108
357A	Office	605
362	Storage	213
363	Storage	213
364	Storage	205
369	Storage	326
370	Office	306
371	Office	306
372	Office	306
373	Office	306
374	Storage	210
375	Storage	210
376	Storage	210
377	Storage	170
378	Storage	130
379	Animal Shed	130
380	Animal Shed	130
385	Pole Shed	680
385A	Storage Shed	288
467	Office / Laboratory	15,282
468	Laboratory	960
469-1	Laboratory	790
471	Garage	756
473	Inactive Growth Chamber	992
474	Growth Chamber	1,006
475	Laboratory	646
487	Storage	314
FISCAL YEAR 2008		
018	Residence	2,304
022	Residence	1,034
039	Storage	1,040
049B	Storage Shed	1,564
1005	Barn	1,900
1020	Shop	580
1052	Storage	420
1053	Storage	364
1054	Storage	70
1070	Office	4,921

Building #	Description	Est. Sq. Ft.
1071	Garage	306
1072	Office	3,276
1073	Garage	180
1104	Storage	396
1161	Scale House	350
1194	Animal Barn	1,787
1328	Poultry House	450
1329	Poultry House	450
1330	Storage Shed	848
1390	Animal Pen	436
1422	Animal Barn	3,000
1425	Animal Barn	2,025
FISCAL YEAR 2009		
240	Water Pumping Station	117
246	Radioactive Waste Storage	910
264	Office / Laboratory	8,250
264B	Shed	192
264C	Physiology Cage House	2,880
270	Poultry House	1,050
271	Poultry House	1,341
274	Poultry Facility	890
318	Office / Laboratory	21,300
319	Office / Laboratory	6,430
FISCAL YEAR 2010		
263	Office / Laboratory	8,600
265	Office / Laboratory	8,600
262	Office / Laboratory	7,699
315	Solvents Building	906
321	Office / Laboratory	6,080
325D	Animal	210
433	Implement Shed	2,800
434	Barn	3,770
435	Animal Shed	456
485	Shed	72
488	Walk-In-Box	98

APPENDIX G: FACILITY EQUIPMENT / SYSTEMS TO BE MAINTAINED

THIS TABLE DETAILS MAJOR FACILITY EQUIPMENT / SYSTEMS NOTED IN APPENDIX B, WORKLOAD ESTIMATES THAT IS TO BE MAINTAINED BY THE SERVICE PROVIDER AS REQUIREMENTS FOR THE CONTRACT SERVICE PROVIDER. THIS LIST IS *NOT* ALL INCLUSIVE.

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
BARC Utility Service - Summary					
High Pressure Heating Plants				9	
Small Heating Systems				120	
Wastewater Treatment Facilities				2	
Water Treatment Plant				1	
Sewage Lift Pumping Stations				7	
Elevated Water Towers				5	
Ground Level Water Storage Tanks				1	
Underground Level Water Storage Tanks				2	
BARC Boiler Systems					
Motor Teel Pump	Baldor	UM3538	W0008101883	2	Work room
		387000 / SJS1200	674	1	B/W filters
Boiler - 350 HP Steam	Cleaver Brooks	CB-266-350		1	309
Boiler - 350 HP Steam	Cleaver Brooks	CB-266-351		1	309
Boiler - 500 HP Steam	Cleaver Brooks	CB-1200-500-150		1	309
Boiler - 200 HP Steam	Cleaver Brooks	CB-101-200		1	309
Water Pump - Boiler Feed		K6-T-S-BF		3	309
Motor	U.S.	E819AU09U178R077 F / 208 VAC 3 Ph		2	309
Motor	Magnetek	R309 / 208 VAC 3 Phase		1	309
Pump and Motor				1	309
Motor	Leland Faraday	M-44050 208		1	309
Fuel Pumps & Motors	IMO	208 Vac 3 Phase		2	309
Condensate Receiver Duplex	Sterling	115 VAC		2	309
Deaerator - Spray Dual Nozzle	PMI			1	309
Condensate Receiver & pumps duplex	Flowtronics	CRHC 2-36		1	309
Motor		208 VAC		2	309

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Air Compressor/Storage Combination System	Ingersol/Rand	208 VAC		1	309
Water Softener & Brine Production Tank	AquaAmerica			1	309
Chemical Feed Pumps	Pulsatron			5	309
Check Valves per Feed Water Pump				2	309
Boiler - 810,000 BTU/HR Steam	Well McLean	488		1	303
Condensate Receiver Simplex	Hoffman			1	303
Boiler - 1446 MBH Steam	Burnham	PF-509		1	426
Condensate Receiver Simple x Motor	Hoffman	115 VAC		2	426
Boiler - 80,000 BTU/HR Warm Air	Johnson Air Ease	GUJ-100-D12-3A		1	426-A
Boiler - 250,000 BTU/HR Warm Air	Crane	241-L250		1	431
Boiler - Steam	Weil McLain	888		1	445
Condensate Receiver Simplex Motor	Sterling	115 VAC		1	445
Boiler - 412,500 BTU/HR Hot Water	Peerless	0-707-WU		1	465
Boiler - 412,500 BTU/HR Hot Water	Peerless	0-707-WU		1	465
Circulator Pump	Bell & Gossett	115 VAC		2	465
Boiler - 643,000 MBH Steam	Peerless	678		1	476
Boiler - 6.4HP Steam	Industrial Boiler Co	P63-PV-02		1	476
Condensate Receiver Simplex Motor	Sterling	115 VAC		1	476
Boiler - 500,000 MBH Hot Water	Lochinvar	PBN0500		1	302
Circulator Pump	Bell & Gossett			2	302
Boiler - 643,000 MBH Hot Water	Weil McLain	678		1	301
Circulator Pumps Motor	Bell & Gossett	115 VAC		3	301
Boiler - 187,500 MBH Hot Water	Crown Boiler Co	6XE-6		1	301-C
Circulator Pump	Bell & Gossett			1	301-C
Boiler - 664 MBH Hot Water	Burnham	V-906		1	301-B
Circulator Pump	Bell & Gossett			1	301-B
Boiler - 182,000 BTU/HR Hot Water	Weil McLain	PWGO-5		1	223

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Boiler - 125 HP Steam	Cleaver Brooks	CB-100-125		1	165
Boiler - 125 HP Steam	Cleaver Brooks	CB-100-125		1	165
Boiler - 250 HP Steam	Cleaver Brooks	CB-101-250		1	165
Deaerating Water Heater				1	165
Water Pump - Boiler Feed	Aurora	HS-TS-BF		2	165
Electric Motor	Marathon	2V6184TTDR7026DJ L / 208 VAC 3 Ph		2	165
Boiler Feed-Water Pump	Aurora	KAT-S-BF		1	165
Motor 208 VAC 3 Phase	Magenek	R309		1	165
Condensate Receiver	Hoffman	Deplex 115 VAC Phase		2	165
Fuel Pumps & Motors	Tulhill	Twin 208 VAC 2 Phase		2	165
Boiler Blow-Down Separator				1	165
Water Treatment Chemical Pump				4	165
Air Compressor	Champion	30-2SR5CC		1	165
Boiler - 234,000 BTU/HR Warm Air	Janitorial	WH-300		1	166-H
Boiler - 163,000 BTU/HR Hot Water	Burnham	P207A -WPI		1	184
Boiler - 474,000 BTU/HR Hot Water	Multitemp	MR-600-H		1	184
Circulator Motor	Bell & Gossett	115 VAC		1	184
Boiler - 80 HP Steam	Cleaver Brooks	CBE-700-80		1	182
Deaerator	Cleaver Brooks	DR-31-3		1	182
Water Softener	Cleaver Brooks	ACC-SMR-150		1	182
Chemical Feed System	Cleaver Brooks	55-PI-V5		1	182
Boiler Feed Water Pumps				1	182
Blow Dow Separator				1	182
Boiler - 183 MBH Hot Water	Burnham	V-35		1	209
Boiler - 100 HP Steam	Cleaver Brooks	CB-101-100		1	202
Boiler - 100 HP Steam	Cleaver Brooks	CB-101-100		1	202
Boiler - 250 HP Steam	Cleaver Brooks	CB-101-250		1	202
Condensate Receiver Simplex	Sterling	4128-G		1	202
Motor	A.O. Smith	C48H2DB5C11		1	202

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Feed-Water Pump Motor	U.S. Electrical	E-797A		1	202
Feed-Water Pump Motor	U.S. Electrical	E-797A		1	202
Feed-Water Pump Motor	U.S. Electrical	E658A		1	202
Fuel Pump	Viking	GG-195-D		2	202
Motor	Baldor	M3156T		1	202
Motor	Marathon	BE143TTDR735CA-BW		1	202
Boiler Feed-Water Pump	Aurora	02-401660-2		1	202
Boiler Feed-Water Pump	Aurora	45-3-BF		1	202
Boiler Feed-Water Pump	Aurora	02-401660-2		1	202
Deaerator	Kawane			1	202
Generator	Onan	50DGCAL30520A		1	202
Boiler - 1,358,000 BTU/HR	Weil McLain	688		1	204-B
Boiler Feed Water System	Sterling	4126-50F		1	204-B
Motor	A.O. Smith	C48J2DB5B3		1	204-B
Boiler - 284,000 BUT/hr Warm Air		LG14-225		1	208-A
Boiler - 465.1 MBH Steam	Burnham	PF-504		1	208-B
Condensate Receiver Simplex	Sterling	4128-G		1	208-B
Motor	A.O. Smith	C48H2DB5C11		1	208-B
Boiler - 240,000 BTU/hr	Modine	DJE-300AF-A		1	
Boiler - 1,725 lb Steam/hr Steam	Fulton	FB-050-A		1	211
Condensate Receiver/Make-up Tank	Fulton			1	211
Boiler Feed Water Pump Motor	Aurora	208 VAC 2 Phase		1	211
Boiler - Steam	Burnham			1	236
Condensate Receiver Simplex	Sterling	4128G		1	236
Motor	Marathon	90M56C34D1221-E		1	236
Boiler - 17,000 BTU/hr Input Warm Air	L.B. White	418-B		1	237
Boiler - 17,000 BTU/hr Input Warm Air	L.B. White	418-B		1	238
Boiler - 17,000 BTU/hr Input Warm Air	L.B. White	418-B		1	239
Boiler - 225,000 BTU/hr Warm Air	Hired Hand	SS-225-XL		1	255-A
Boiler - 225,000 BTU/hr Warm Air	Hired Hand	SS-225-XL		1	255-A
Boiler - 225,000 BTU/hr Warm Air	Hired Hand	SS-225-XL		1	255-A
Boiler - Hot Water	Weil McLain			1	254

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Circulator Pumps Various Sizes A	Bell & Gossett	115 VAC/1725 RPM		11	254
Boiler - 168,000 BTU/hr Input Warm Air	L.B. White	408G-3		1	267
Boiler - 168,000 BTU/hr Input Warm Air	L.B. White	408G-3		1	267
Boiler - 215,000 BTU/hr Input Warm Air	L.B. White	AW215BHP1		1	273
Boiler - 17,000 BTU/hr Input Warm Air	L.B. White	418-B		1	174
Boiler - 17,000 BTU/hr Input Warm Air	L.B. White	418-B		1	275
Boiler - 215,000 BTU/hr Input Warm Air	L.B. White	AW215BHP1		1	178
Boiler - 215,000 BTU/hr Input Warm Air	L.B. White	AW215BHP1		1	277
Boiler - 120,000 BTU/hr Input Warm Air	Trane			1	052
Boiler - 800 HP, Steam	Cleaver Brooks	CB-100-800		1	014
Boiler - 700 HP, Steam	Cleaver Brooks	CB-100-700		1	014
Boiler - 700 HP, Steam	Cleaver Brooks	CB-100-700		1	014
Boiler - 700 HP, Steam	Cleaver Brooks	CB-100-700		1	014
Boiler - 400 HP, Steam	Cleaver Brooks	CB-100-400		1	014
Feed Water Pump Sets	Aurora	208 VAC 3 Phase		1	014
Duplex Fuel Pumping Station with IMO	Phillips			1	014
Pump Motor	IMO	208 VAC 3 Phase		2	014
Air Compressor				2	014
Water Treatment Chemical Feed Pumps				6	014
Suction Pump	Aurora	208 VAC 3 phase		2	014
Sump Pump				2	014
Condensate Receivers Duplex				2	014
Deaerator	Kawane			1	014
Water Softener	Bruner			1	014
Hot Water Heater	Rudd			1	014
Smoke Opacity Monitors	Preferred / Rimcor Instruments			3	014
Exhaust Fan	Dayton			1	014
Boiler - 206,000 BTU/HR Hot Water	Peerless	WV-05-200-WPC		1	017
Boiler - 196,000 BTU/HR, Warm Air	Armstrong	LBR80B196B24-5A		1	023
Boiler	Weil McLain			1	029

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Boiler - 160 MBH Hot Water	Burnham	11-15A-T		1	030
Boiler - 30,000, Warm Air	Dynavent	DNV 40BP		1	470-AA
Boiler - 30,000, Warm Air	Dynavent	DNV 40BP		1	470-AA
Boiler - 30,000, Warm Air	Dynavent	DNV 40BP		1	470-BB
Boiler - 30,000, Warm Air	Dynavent	DNV 40BP		1	470-BB
Boiler - 30,000 BTU/HR, Warm Air	Vanguard	DNV 40BP		1	407-CC
Boiler - 30,000 BTU/HR, Warm Air	Vanguard	DNV 40BP		1	407-CC
Boiler - 30,000 BTU/HR, Warm Air	Dynavent	DNV 40BP		1	470-DD
Boiler - 30,000 BTU/HR, Warm Air	Dynavent	DNV 40BP		1	470-DD
Boiler - 30,000 BTU/HR, Warm Air	Dynavent	DNV 40BP		1	470-EE
Boiler - 30,000 BTU/HR, Warm Air	Dynavent	DNV 40BP		1	407-EE
Boiler - 30,000 BTU/HR, Warm Air	Vanguard	DNV 40BP		1	407-FF
Boiler - 30,000 BTU/HR, Warm Air	Vanguard	DNV 40BP		1	470-FF
Boiler - 30,000 BTU/HR, Warm Air	Dynavent	DNV 40BP		1	407-GG
Boiler - 30,000 BTU/HR, Warm Air	Dynavent	DNV 40BP		1	470-GG
Boiler - 11,100 BTU/hr, Warm Air	Dynavent	CDV156A		1	470-HH
Boiler - 11,100 BTU/hr, Warm Air	Dynavent	CDV156A		1	470-HH
Boiler - 30,000 BTU/hr, Warm Air	Dynavent	DNV 40BP		1	470-II
Boiler - 30,000 BTU/hr, Warm Air	Dynavent	DNV 40BP		1	470-II
Boiler - 145,000 BTU/hr, Hot Water	Weil McLain	CG-6PION		1	1325
Circulator Pump	Bell & Gossett			2	1325
Boiler - 1,250,000 BTU/hr, Hot Water	Weil McLain	1178		1	1292
Circulator Pump	Bell & Gossett			2	1292
Boiler - 465 MBH, Steam	Burnham	PF-504		1	1194
Condensate Receivers Duplex	Sterling			1	1194
Boiler - 465 MBH, Steam	Burnham	PF-504		1	1140
Condensate Receivers Duplex	Hoffman			1	1140

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Boiler - 16.4 HP, Steam	Kewanee	M-155-KG		1	1126
Boiler - 16.4 HP, Steam	Kewanee	M-155-KG		1	1126
Duplex Boiler Feed-Water System	Kewanee			1	1126
End Suction Pump	Armstrong	208 VAC 3 Phase		1	1126
Condensate Receiver Simplex	Sterling			1	1126
Boiler - Hot Water	National			1	1062
Circulator Pump	Bell & Gossett			3	1062
Boiler - 130,000 BTU/HR, Hot Water	American Standard	G-26		1	1001
Circulator Pump	Bell & Gossett			2	1001
Boiler - 209,000 BTU/hr, Steam	Weil McLain	EG-65		1	1002
Steam/Hot Water Converter				1	1002
Circulator Pump	Bell & Gossett			1	1002
Condensate Receiver Simplex	Hoffman			1	1002
Boiler - Warm Air	Reznor			1	1006
Boiler - Warm Air	Reznor			1	1006
Boiler - 254 MGH, Hot Water	Weil McLain	EG-35		1	1017
Boiler - 110 MBH, Hot Water	Weil McLain	EG-45		1	1018
Circulator Pump	Armstrong			1	1018
Boiler - Warm Air	Addison			1	1019
Boiler - Warm Air	Modine	PD50AA0111		1	1074
Boiler - Warm Air	Modine	PD50AA0111		1	1076
Boiler - Warm Air	Modine	PD50AA0111		1	1077
Boiler - 120,000 BTU/hr, Warm Air	Coleman Evcon	MGP150BNIAX		1	1080
Boiler - 120,000 BTU/hr, Warm Air	Coleman Evcon	MGP150BNIAX		1	1080
Boiler - 120,000 BTU/hr, Warm Air	Coleman Evcon	MGP150BNIAX		1	1081
Boiler - 120,000 BTU/hr, Warm Air	Coleman Evcon	MGP150BNIAX		1	1082
Boiler - 1155 MBH, Hot Water	Weil McLain			1	1040
Circulator Pump	Bell & Gossett			2	1040
Boiler - 1155 MBH, Hot Water	Weil McLain			1	1041
Circulator Pump	Bell & Gossett			3	1041
Boiler - 145,000 BTU/hr, Hot Water	Weil McLain	C-6-PIDN		1	1050

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Circulator Pump	Bell & Gossett			1	1050
Boiler - Warm Air				1	1051
Boiler - Steam	Weil McLain			1	1090
Condensate Receiver Simplex	Hoffman			1	1090
Boiler - Warm Air	L.B. White			1	1191
Boiler - 764 MBH, Hot Water	Weil McLain	778		1	1180
Circulator Pump	Bell & Gossett			4	1180
Boiler - Steam	Weil McLain	778		1	1160
Condensate Receiver Simplex	Sterling			1	1160
Boiler - Warm Air	L.B. White	AW-250		1	1201
Boiler - Warm Air	L.B. White	AW-250		1	1204
Boiler - Warm Air	L.B. White	AW-250		1	1205
Boiler - 125,000 BTU/HR, Warm Air	Coleman Evcon	MGP150BNJAX		1	1207
Boiler - 1527 MBH, Hot Water	Weil McLain			1	1292
Circulator Pump	Bell & Gossett			2	1292
Boiler - 145,000 BTU/HR, Hot Water	Weil McLain	CG-6-PIDN		1	1302
Circulator Pump	Bell & Gossett			2	1302
Boiler - 588,000 MBH, Hot Water	Bryant	246-8		1	1320
Circulator Pump	Bell & Gossett			1	1320
Boiler - 145,000 BTU/HR, Hot Water	Weil McLain	CG-6-PIDN		1	1420
Boiler - 101,250 BTU/HR, Warm Air	Sterling	TF-150		1	Range 3 Hoop House 1
Boiler - 101,250 BTU/HR, Warm Air	Sterling	TF-150		1	Range 3 Hoop House 2
Boiler - 101,250 BTU/HR, Warm Air	Sterling	TF-150		1	Range 3 Hoop House 3
Boiler - Warm Air	Reznor	OH-95		1	454
Boiler - Warm Air	Reznor	OH-95		1	454
Boiler - Warm Air		PCLU-LD20N140-A		1	483
BARC Cooling Tower Systems					
Cooling Tower		826 ton capacity		1	004
Cooling Tower	Morr Control, Inc	SYS T2-A-B1-B3 / 400 ton capacity		1	007
Cooling Tower	Hydac	250 ton capacity		1	011A
Cooling Tower	Pulsafeeder Chemical	300 ton capacity		2	010A
Cooling Tower		640 ton capacity		1	001

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Cooling Tower	Luiqidtron	DC4000 / 2 Cells @ 270 ton capacity each		1	010B
Cooling Tower		35 ton capacity		1	009
Cooling Tower		300 ton capacity		1	307B
Cooling Tower		300 ton capacity		1	307C
Hot Water Circulating and Chilled Water Closed System				1	001
Hot Water Circulating and Chilled Water Closed System				1	003
Hot Water Circulating and Chilled Water Closed System				1	004
Hot Water Circulating and Chilled Water Closed System				1	006
Hot Water Circulating and Chilled Water Closed System				1	007
Hot Water Circulating and Chilled Water Closed System				1	010A
Hot Water Circulating and Chilled Water Closed System				1	010B
Hot Water Circulating and Chilled Water Closed System				1	011A
Hot Water Circulating and Chilled Water Closed System				1	230
Hot Water Circulating and Chilled Water Closed System				1	306
Hot Water Circulating and Chilled Water Closed System				1	307B
Hot Water Circulating and Chilled Water Closed System				1	307C
BARC Water Treatment Plant					
Actuator / Positioner		2 Regulators and Scales		2	310
Blower, Aeration	NYB	3 HP		1	310
Chlorinator		V10K		2	310
Dock Platform	Advanced Lifts	8,000 lb Capacity		1	310
Filter, Sand	General Filter, Co	Top Load		6	310
Pump	Aurora	500 gpm, 40 HP		1	401
Pump	Aurora	500 gpm, 40 HP		1	402

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Pump, Fire	Aurora	2500 gpm, 150 HP		1	403
Pump, Raw Water	Floway	450 gpm, 15 HP		1	301
Pump, Raw Water	Floway	450 gpm, 15 HP		1	302
Pump, Raw Water	Floway	450 gpm, 15 HP		1	303
Pump, Float Raw Water	Worthington	600 gpm, 60 HP		1	304
Signal Conditioning Unit		Chlorine Feeder		1	310
Soda Ash Feed System	EMC			1	310
Residual Anodizer		Mirro -2000		1	310
Ventilation System				2	310
W & T PCL Control System		Chlorinator Control		1	310
BARC Wastewater Plant - EAST					
Communicators	Disposal Waste System, Inc.	3 HP		2	218
Influent Pump Station	Fairbanks Morse	D5731M, 1600 gpm @ 21 ft of head		1	218
Pump, Submersible				2	218
Screen, Mechanical		Self cleaning, 2.3 MGD		2	218
Lagoon		620,000 gallons		3	218
Mixer	Aqua-Aerobic Systems	10 HP @ 885 rpm or 6.4 HP @ 705 rpm, dual speed control		3	218
Clarifiers, Final		481 gpm @ average flow		2	218
Pumps, Mixed Liquor Recirculation	Fairbanks Morse	D5731M, 4000 gpm @ 15 ft of head		2	218
Pumps, Return Sludge	Fairbanks Morse	D5434M, 800 gpm @ 34 ft of head		4	218
Effluent Pump Station		1.5 gallons / sq ft @ average flow		3	218
Effluent Filter Pump	Fairbanks Morse	255 gpm @ 26 ft of head		2	218
Chlorination System				1	218
Sulfur Dioxide System				1	218
Pumps, Plant Outfalls Facility	Fairbanks Morse	1600 gpm @ 11 ft of head		2	218
Sodium Hydroxide System		4000 gallons		1	218
Sludge Holding Facility		360,000 gallons - (2) tanks		1	218
Sludge Holding Facility Blowers	United Blower, Inc	31 HP		4	218
BARC Wastewater Plant - WEST					
Shredder	Disposal Waste System, Inc.	3 HP		1	015
Influent Pump Station	Pumpex	530 gpm @ 27 ft of head, 7.5 HP		2	015

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Grit Removal Facility	Eutek Systems	530 gpm		2	015
Flow Equalization Tank		46, 580 gallon		1	015
Aerators, Submersible		7.5 HP		1	015
Pumps, Submersible	Pumpex	70 gpm @ 13 ft of head, 1 HP		3	015
Wastewater Treatment Unit	DAVCO	100,000 gal		2	015
Clarifier, Integral		18'-10" diameter		2	015
Digester, Aerobic				2	015
Blower, Aeration	Sutorbilt 6M	643 CFM (inlet), 480 CFM (discharge), 40 HP		3	015
Effluent Filter	Parkson	530 gpm		2	015
UV Disinfection and Cascade Aeration	Ultratech	0.76 Millions of Gallons per Day		1	015
Effluent Pump Station	Pumpex	530 gpm @ 18 ft of head		2	015
Methanol Feed System		2000 Gallons		1	015
Trisodium Phosphate		(2) 550 gallon tanks		1	015
Sludge Holding Tank		28200 gallon		1	015
Aerator, Submersible	Framco	7.5 HP		1	015
DDC Systems (Honeywell)					
Annunciator				1	WWTP - E
C-BUSS			DDC 010010200	1	014
C-BUSS			DDC 010010300	1	006
C-BUSS			DDC 010010500	1	007
C-BUSS			DDC 010010600	1	003
C-BUSS			DDC 010010700	1	Library 1
C-BUSS			DDC 010010800	1	Library 2
C-BUSS			DDC 010011000	1	WWTP-W
C-BUSS			DDC 010011100	1	011A
C-BUSS			DDC 010011200	1	010A
Computer - Portable Terminal				1	426
Computer*	Gateway			1	426
Controller - R70443				1	310
Controller - R70443				1	011A
Controller - R70443				1	WWTP - W
Controller - R70443				1	WWTP - E
Controller - R7044B				1	309
Controller - R7044B				1	309A
Controller - R7044D				1	003
Controller - R7044D				1	006
Controller - R7044D				1	1180
Controller - R7044D				1	580
Controller - R7044E				1	006
Controller - R7044E				1	007

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Controller - R7044E				1	014
Controller - R7044E				2	NAL
Controller - R7044E				1	010A
Controller - R7044E				1	1051
Controller - R7044E				1	165
Controller - R7044E				1	202
Digital Input				6	003
Digital Input				6	006
Digital Input				7	007
Digital Input				19	014
Digital Input				1	1180
Digital Matrix Board				1	WWTP - W
Digital Matrix Board				1	WWTP - E
Digital Matrix Board				2	NAL
Digital Matrix Board				1	309
Digital Matrix Board				1	309A
Freezer Sensor				34	006
Humidity Sensor				6	007
Humidity Sensor				1	1180
Modem				3	426
Modem				2	WWTP - W
Modem				1	WWTP - E
Modem			DDC 010040200	1	309A
Modem			DDC 010050200	1	202
Modem			DDC 010060200	1	1180
Modem			DDC 010070200	1	309
Modem			DDC 010080200	1	580
Modem			DDC 010090200	1	165
Modem			DDC 010100200	1	WWTP-E
Modem			DDC 010150200	1	1051
Printer				1	426
Start / Stop Point				13	014
Start / Stop Point				3	1180
Temperature Sensor				5	003
Temperature Sensor				1	006 (AHU 1)
Temperature Sensor				7	007
Temperature Sensor				2	1180
Temperature Sensor - Freezer				2	1180
Temperature Sensor - Space				1	1180
Temperature Sensor (AHU)				4	007
Transducer - Analog Output				3	1180
UPS System				1	426
BAS Equipment (Siemens)					

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Trunk Isolator Extender				1	11A
Trunk Isolator Extender				1	003
Trunk Isolator Extender				1	005
Trunk Isolator Extender				1	006
Trunk Isolator Extender				1	007
Trunk Isolator Extender				1	011
Trunk Isolator Extender				10	014
Trunk Isolator Extender				1	017
Trunk Isolator Extender				1	038
Trunk Isolator Extender				1	043/046/047
Trunk Isolator Extender				1	050
Trunk Isolator Extender				9	161
Trunk Isolator Extender				1	163
Trunk Isolator Extender				1	163F
Trunk Isolator Extender				1	173
Trunk Isolator Extender				1	177
Trunk Isolator Extender				1	177A
Trunk Isolator Extender				1	177B/C
Trunk Isolator Extender				1	178-2
Trunk Isolator Extender				3	200/201
Trunk Isolator Extender				1	204
Trunk Isolator Extender				1	230
Trunk Isolator Extender				1	308C1019
Trunk Isolator Extender				9	1040
Trunk Isolator Extender				1	1041/1042
Trunk Isolator Extender				1	1043

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Trunk Isolator Extender				1	1044/1045
Trunk Isolator Extender				1	NAL
Trunk Isolator Extender				1	1126
Fiber Optic Interface Dual				1	010a
Fiber Optic Interface Dual				1	010b
Fiber Optic Interface Dual				1	011
Fiber Optic Interface Dual				1	012
Fiber Optic Interface Dual				1	001
Fiber Optic Interface Dual				1	002
Fiber Optic Interface Dual				1	004
Fiber Optic Interface Dual				1	043/046/047
Fiber Optic Interface Dual				1	182
Fiber Optic Interface Dual				1	209
Fiber Optic Interface Dual				4	302
Fiber Optic Interface Dual				1	303
Fiber Optic Interface Dual				1	306
Fiber Optic Interface Dual				2	307
Fiber Optic Interface Dual				1	307B
Fiber Optic Interface Dual				1	307C
Fiber Optic Interface Dual				1	308
Fiber Optic Interface Dual				1	309
Fiber Optic Interface Dual				1	310
Fiber Optic Interface Dual				1	426
Fiber Optic Interface Dual				1	476
Fiber Optic Interface Dual				2	1120
Fiber Optic Interface Hub				1	302

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Fiber Optic Interface Hub				1	1040
Fiber Optic Interface Hub				1	1180
Modem 33400				1	200/201
Modem 33400				1	211
Modem 33400				2	426
Fire Alarms				1	010
Fire Alarms				1	230
Elevators					
Elevator		Passenger		1	001
Elevator		Freight		1	002
Elevator		Passenger		1	003
Elevator		Passenger		1	004
Elevator		Passenger		1	005
Elevator		Freight		1	006
Elevator		Passenger		1	007
Elevator		Freight		1	008
Elevator		Passenger		1	010A1
Elevator		Passenger		1	010A2
Elevator		Passenger		1	011A1
Elevator		Passenger		1	011A2
Elevator		Freight		1	011HH8
Elevator		Freight		1	011HH17
Elevator		Freight		1	050HH1
Elevator		Freight		1	050HH3
Elevator		Passenger / Freight		1	161
Elevator		Dumbwaiter		1	162
Elevator		Hydraulic Lift		1	182
Elevator		Dumbwaiter		1	200
Elevator		Freight		1	201
Elevator		Dumbwaiter		1	203
Elevator		Dumbwaiter		1	204
Elevator		Passenger		1	306
Elevator		Passenger		1	307
Elevator		Passenger		1	307A
Elevator		Passenger		1	307B
Elevator		Dumbwaiter		1	307B
Elevator		Passenger		1	308
Elevator		Dumbwaiter		1	309
Elevator		Passenger #1		1	NAL
Elevator		Passenger #2		1	NAL
Elevator		Passenger #3		1	NAL
Elevator		Freight		1	NAL
Elevator		Dumbwaiter		1	NAL
Elevator		Booklift		1	NAL
Elevator		Passenger / Freight		3	USNA

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
FIRE ALARMS					
Fire Alarm	Notifier	AFP-400			001
Fire Alarm	Notifier	AFP-200			002
Fire Alarm	Notifier	AFP-400			003
Fire Alarm	Ansul	R-120			003 Cafeteria
Fire Suppression System	Wet Chemical				003 Cafeteria
Fire Alarm	Notifier	AFP-400			004
Fire Alarm	Notifier	AFP-400			005
Fire Alarm	Notifier	AFP-200			006
Fire Alarm	Notifier	AFP-400			007
Fire Alarm	Fire Lite	MS-432A			007 Rm 018
Fire Suppression System	Fenwall	FM-200			007 Rm 018
Fire Alarm	Notifier	AFP-200			009
Fire Alarm	Fire-Lite	MS-9200			010 (GH)
Fire Alarm	Fire-Lite	MS-9200			010 (HH)
Fire Alarm	Simplex	4100			010A
Fire Alarm	Edwards	ESLPS8B			010B
Fire Alarm	Cerberus Pyrotonics	MXL-IQ			011 (HH1-9)
Fire Alarm	Simplex	4010			011 (HH10-19)
Fire Alarm	Notifier	AFP-200			011A
Fire Alarm	Notifier	AFP-200			012 North
Fire Alarm	Fire-Lite	MP-24			012 West
Fire Alarm	Simplex	4002			015
Fire Alarm	Simplex	4001			017
Fire Alarm	Fire-Lite				030
Fire Alarm	Simplex	4002			043
Fire Alarm	Simplex	4002			046
Fire Alarm	Simplex	4002			047
Fire Alarm	Cerberus Pyrotonics	MXL-IQ			047A
Fire Alarm	Pyrochem	CP-35			050
Fire Alarm	FCI				052
Fire Alarm	Notifier	500			053
Fire Alarm	Notifier	SGL-404			085
Fire Alarm	Notifier	AFP-200			161
Fire Alarm	Cerberus Pyrotonics	MXL-IQ			162
Fire Alarm	Fire-Lite	MS-9200			163
Fire Alarm	Notifier	AFP-200			163F
Fire Alarm	Cerberus Pyrotonics	MXL-IQ			173
Fire Alarm	Notifier	AFP-200			177
Fire Alarm	Notifier	AFP-200			177A
Fire Alarm	Cerberus Pyrotonics	MXL-IQ			177B
Fire Alarm	Notifier				177C

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Fire Alarm	Fire-Lite	MS-9200			178-2
Fire Alarm	Fire-Lite	MS-9200			182
Fire Alarm	Notifier	AFP-200			200
Fire Alarm	Notifier	AFP-200			201
Fire Alarm	Cerberus Pyrotonics	MXL-IQ			203
Fire Alarm	Notifier	SGL-2000			204B
Fire Alarm	Notifier	AFP-200			209
Fire Alarm	Notifier	AFP-200			211
Fire Alarm	Notifier	AFP-200			301
Fire Alarm	FCI				302
Fire Alarm	Fire-Lite	MS-9200			303
Fire Alarm	Notifier	AFP-200			306
Fire Alarm	Notifier	AFP-200			307
Fire Alarm	Cerberus Pyrotonics	MXL-IQ			307B
Fire Alarm	Cerberus Pyrotonics	MXL-IQ			307C
Fire Alarm	Notifier	AFP-200			308
Fire Alarm	Notifier	AFP-200			308C
Fire Alarm	Fire-Lite	200			309
Fire Alarm	Notifier	AFP-200			310
Fire Alarm	Notifier	AFP-200			426
Fire Alarm	Fire-Lite	MS-9200			476
Fire Alarm	Fire-Lite	MS-9200			602
Fire Alarm	Simplex	4010			1001
Fire Alarm	Simplex	4010			1002
Fire Alarm	Notifier	AFP-200			1040
Fire Alarm	Notifier	AFP-200			1041
Fire Alarm	Notifier	AFP-200			1042
Fire Alarm	Fire-Lite	MS-9200			1043
Fire Alarm	Fire-Lite	MS-9200			1044
Fire Alarm	Fire-Lite	MS-9200			1045
Fire Alarm	Simplex	4001			1051
Fire Alarm	Notifier	AFP-200			1126
Fire Alarm	Notifier	AFP-200			1180
Control Panel	Fenwall				1180 Rm 6B
Detector	Minivesda				1180 Rm 6B
Fire Suppression System	Fenwall				1180 Rm 6B
Fire Alarm	Cerberus Pyrotonics	MXL-IQ			1190
Fire Alarm	Pyrochem	PCI 50 BC			010AA
Fire Alarm	Ansul	SP 50			033A
Fire Alarm	Ansul	SP 50			033B
Fire Alarm	Ansul	SP 50			033D
Fire Alarm	Ansul	SP 50			033E
Fire Alarm	Ansul	SP 50			301G

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Fire Alarm	Ansul	SP 50			306A
Fire Alarm	Ansul	SP 50			312A
Fire Alarm	Ansul	SP 50			312B
Fire Alarm	Cerberus Pyrotonics	MXL			NAL
Fire Sub-Control Panel	Siemens	RCC-2			NAL
Fire Pump	Peerless Centrifugal	6AEF10	161316		NAL
Fire Pump Controls	Hubbell	LX-2100	A647111-1-1		NAL
Fire Transfer Switch	Hubbell	Lexco Bulletin 250			NAL
Fire - Preaction System	Potter	PFC Series PFC2000BC			NAL Transformer Rm
Fire - Preaction System	Viking	PAR-3 / B-1			NAL 5th Floor
Fire - Preaction System	Viking	Firecycle III / Control Panel E1			NAL 14th Floor
Stair Pressurization System					NAL
Smoke Detectors				1640	
Heat Detectors				150	
Pull Stations				402	
Horn/Strobe				280	
Bells				220	
Flow Switches				98	
Temper Switches				57	
Fire Alarm Panels				60	
Fire Pumps				5	
Jockey Pumps				5	
FIRE SPRINKLER SYSTEMS					
Wet Sprinkler System				1	001
Dry Sprinkler System				1	001
Fire Pump				1	001
Fire Alarm Panel				1	002 Basement
Sprinkler Control Valve				2	002 Basement
Sprinkler Control Valve				1	002 1st Floor
Dry Sprinkler System				1	002 Attic South
Wet Sprinkler System				1	003
Fire Pump				2	003
Wet Sprinkler System				1	004
Fire Pump				1	004
Fire Pump				1	006 Basement 4
Fire Alarm Panel				1	006 Basement B-12
Annunciator				1	006 Main Lobby
Dry Sprinkler System				1	006 Attic

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
OS&Y					
Fire Pump				1	007 Basement 033
OS&Y - Main				1	007 Basement 033
Fire Alarm Panel				1	007 Basement 02
Annunciator				1	007 Main Lobby
OS&Y Shut off Valves				1	007 East Stairwell each Floor
Fire Pump				1	010A Basement 008
OS&Y - Main				1	010A Basement 008
Fire Alarm Panel				1	010A 009
Annunciator				1	010A - West Main Entrance, Level 2
OS&Y Shut off Valves				3	010A Stairwells each Floor
OS&Y Wet System				1	012
Dry System (NMR)				2	012 Attic & 1st Floor
Fire Alarm Panel				2	012
Wet Sprinkler System				1	200 Attic
Dry Sprinkler System				2	200 Attic
Dry Sprinkler System				1	201
Wet Sprinkler System				1	211
Dry Sprinkler System				1	302
OS&Y				1	306 Attic North
OS&Y				1	306 Attic South
OS&Y				1	306 Basement North
OS&Y				1	306 Basement South
Annunciator				1	306 1st Floor
Fire Alarm Panel				1	306 Basement
Wet Sprinkler System				2	307 Attic
Dry Sprinkler System				2	307Attic
Dry Sprinkler System				2	308 Attic
Wet Sprinkler System				1	308C
Generators					
Generator	Generac	275 KW		1	001
Generator	Onan	300 KW		1	002

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Generator	Katolight	400 KW		1	004
Generator	Onan	300 KW		1	006
Generator	Katolight	175 KW		1	007
Generator	F.G. Wilson	344 KW		1	010
Generator	Onan	800 KW		1	010A
Generator	Onan	1000 KW		1	010B
Generator	Onan	250 KW		1	011
Generator	Onan	750 KW		1	011A
Generator	Onan	40 KW		1	011 Lift Station
Generator	United Power	150 KW		1	014
Generator	Onan	300 KW		1	015
Generator	Onan	175 KW		1	052
Generator	Onan	175 KW		1	052
Generator	Onan	125 KW		1	053
Generator	Onan	450 KW		1	161
Generator	Onan	125 KW		1	162
Generator	Onan	45 KW		1	165
Generator	Katolight	175 KW		1	173
Generator	Onan	15 KW		1	175
Generator	Onan	80 KW		1	178-1
Generator	Generac	25 KW		1	194
Generator	Onan	230 KW		1	200
Generator	Onan	175 KW	50DGCAL30520A	1	201
Generator	Onan	125 KW		1	211
Generator	Katolight	100 KW		1	218A
Generator (Mobile)	Onan	75DYC-15R/2072B	772475909	1	218D
Generator	Katolight	600 KW		1	218J
Generator	Onan	400 KW		1	230
Generator	Onan	50 KW		1	240
Generator	Onan	20 KW		1	267
Generator	Generac	125 KW		1	304
Generator	Onan	45 KW		1	306
Generator	Onan	125 KW		1	307
Generator				1	307B
Generator				1	307C
Generator	Onan	125 KW		1	308
Generator	Onan	125 KW		1	308
Generator	Onan	80 KW		1	308C
Generator	Onan	125 KW		1	309
Generator	Caterpillar	300 KW		1	310
Generator	Onan	20 KW		1	426
Generator	Onan	150 KW		1	476
Generator	Onan	125 KW		1	1002
Generator	Onan	150 KW		1	1040
Generator	Onan	50 KW		1	1044
Generator	Onan	80 KW		1	1064

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Generator	Onan	100 KW		1	1083
Generator	Onan	125 KW		1	1126
Generator	Onan	150 KW		1	1180
Generator	Onan	40 KW		1	1207
Generator	Generac	125 KW		1	1286
Generator	Generac	125 KW		1	1500
Generator - Portable					
Generator - 11 additional on line FY05					
HVAC Systems				853	Various BARC Bldgs
HVAC Window Units				133	B-005
Laboratory Equipment					
Cold Box				1	B-011A Rm 244
Cold Table				1	B-011A Rm 238
Cool Flow Circulator				3	Env. Quality Lab
Culture Chamber				1	B-011A Rm 274
Freeze Drier				4	Various BARC Labs
Freezer				45	Various BARC Labs
Fume Hood				353	Various BARC Labs
Growth Chamber				103	Various BARC Labs
Ice Machine				25	Various BARC Labs
Incubator				93	Various BARC Labs
Incubator Shaker				2	B-011A
Refrigerated Centrifuge				8	Various BARC Labs
Refrigeration Unit				1	B-011A
Refrigerator				138	Various BARC Labs
Refrigerator / Freezer				32	Various BARC Labs
Scientific Chiller				7	Various BARC Labs
Sure Temperature Chamber				4	B-011A Rm 123
Trap Vacuum Refrigerator				1	Various BARC Labs
Ultra-Low Cooler				105	Various BARC Labs
Walk-in Cooler				62	Various BARC Labs

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Water Bath				10	Various BARC Labs
Reverse Osmosis System - Pure Water					
Reverse Osmosis System	Hydromax	2 - 2.5 x 25		1	001
Reverse Osmosis System	Crane Environment			1	002
Reverse Osmosis System	Hydromax			1	004
Reverse Osmosis System	Zyzatech			1	006
Reverse Osmosis System	Culligan			1	009 Basement
Reverse Osmosis System	Hydac			1	010 Greenhouse 2
Reverse Osmosis System	E2 Osmonics			1	010 HH 5
Reverse Osmosis System	Environmenta l Prod.	1500		1	010A
Reverse Osmosis System	Ecodyne			1	010B
Reverse Osmosis System	E2 Osmonics			1	011
Reverse Osmosis System	Zyzatech	U1800		1	011A
Reverse Osmosis System	EPRO			1	021 HH18
Reverse Osmosis System	E2 Osmonics			1	050
Reverse Osmosis System	Culligan			1	162
Reverse Osmosis System	EPRO	600		1	200
Reverse Osmosis System	E2 Osmonics			1	306
Reverse Osmosis System	E2 Osmonics			1	307
Reverse Osmosis System	E2 Osmonics			1	308
Deionizer				1	230
Water Purification System	Solution	2000		1	163F
Security Gates					
Electric / Hydraulic Security Gate	Hy-Security	222SS / Proximity Card Entry			Eastline Road
Electric / Hydraulic Security Gate	Hy-Security	222SS / Proximity Card Entry			Entomology Road
Electric / Hydraulic Security Gate	Hy-Security	222SS / Proximity Card Entry			Dairy Area - West
Electric / Hydraulic Security Gate	Hy-Security	222SS / Proximity Card Entry			Dairy Area - East
Electric / Hydraulic Security Gate	Hy-Security	222SS / Proximity Card Entry			Southfarm - Entry
Electric / Hydraulic Security Gate	Hy-Security	222SS / Pressure Loop			Southfarm - Bridge
Electric / Hydraulic Security Gate	Hy-Security	222SS / Proximity Card Entry			APU - Front
Electric / Hydraulic Security Gate	Hy-Security	222SS / Proximity Card Entry			APU - Rear
Electric / Magnetic Security Gate	Hy-Security				Dairy Area - Bldg 161
Unfired Vessels					
Autoclave	MERC			1	001 Rm 024
Autoclave	Market Forge	STME-L		1	001 Rm 116

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Autoclave	Steromaster	MKII		1	001 Rm 330
Autoclave	AMSCO	G-116		1	002 Rm 218
Autoclave	AMSCO	SG-120		1	002 Rm 212
Autoclave				1	004 Rm 007
Autoclave				1	009 HH2
Autoclave	AMSCO	3021	10EQSF	1	010A Rm 237
Autoclave	Consolidated		507588	1	011 HH2
Autoclave	Consolidated	BD 1588	5200-70	1	011 HH2
Autoclave	Consolidated	BD 1846	5300-78	1	011 HH4
Autoclave	Castle	T-60	470837	1	011 HH5
Autoclave	Consolidated	SSR-3A-P		1	011A Rm 131
Autoclave	AMSCO	3021		1	011A Rm 217
Autoclave					011A Rm 227
Autoclave	AMSCO	3021	AG0002751337	1	011A Rm 240
Autoclave	AMSCO	3021	CC88986S	1	011A Rm 269
Autoclave	Hirayama	HA 300M	900787276	1	011A Rm 269
Autoclave	Buxton		18145	1	011A Rm 306
Autoclave	Consolidated			1	011A Rm 316
Autoclave	Consolidated		AG0002472713	1	011A Rm 316
Autoclave	AMSCO	LS-2036	308030	1	050 Rm 9E
Autoclave	Tomy	S5-325E	705-152	1	1041 Wash Room
Autoclave	Tomy	S5-325	K 027-111	1	1320 Rm 009
Autoclave	Castle	122 LS	00G60932	1	1320 Rm 009
Autoclave	Vernitron	D1626CPZ-1	76180	1	161 Rm 12
Autoclave	Hirayama	HVE-50		1	173 Rm 107
Autoclave	Tomy	SS-325E		1	200 Rm 108B
Autoclave	Barnstead International	C2250		1	200 Rm 109
Autoclave	Castle	3522	52942	1	200 Rm 12
Autoclave	Brinkman	2540E		1	200 Rm 22
Autoclave	Consolidated	T16	11057	1	211 Rm 112
Autoclave				1	230 Rm 118
Autoclave	Hirayama	HVP 50	10488008	1	306 Rm 118
Autoclave	Tomy	SS 325		1	306 Rm 309
Autoclave	Castle	122	98F59343	1	307 Rm 210
Autoclave	Castle	Thermatic-60	450864	1	307 Rm 219
Autoclave	Tomy	SS-355E		1	307 Rm 304
Autoclave	Steris - AMSCO			1	308 Rm 203/204
Autoclave	AMSCO	3021	0002752260/10EC	1	308 Rm B-9
Autoclave	AMSCO	Eagle 3011	0135390-02	1	308C
Autoclave	Consolidated	SR-24EMCV		1	308C
Autoclave	AMSCO	3011		1	476 Rm 201
Sterilizer	New Brunswick	AS10		1	002 Rm 212
Sterilizer	Castle	3522 SD2020		1	006 Rm 9

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Sterilizer	Consolidated	20 D24-PB	2751394	1	006 Rm 9
Sterilizer	Castle	3522 SD1616	2751933	1	006 Rm 210
Sterilizer	Barnstead International	ST75925		1	009 Rm 51
Sterilizer	ISEC, Inc			1	010 GH5 Sec5
Sterilizer	Consolidated	SSR-3A-PB	32893	1	010 Rm GH2 Sec 5
Sterilizer	Consolidated			1	010 Rm GH4 Sec 6
Sterilizer				1	010 Rm GH5 Sec 6
Sterilizer	Castle	3522 SD2020	95K57343	1	010 Rm HH4
Sterilizer	Consolidated	SSR-3A-PB	102894	1	010A Rm 108
Sterilizer	Consolidated	SR-24ATC	102794	1	010A Rm 130
Sterilizer	Medo Buxton Sci		AG002470063/16	1	050 Rm 5, GH3 Sec 1
Sterilizer, Gravity	Steris - AMSCO	3011		1	010 Rm HH6
Sterilizer, Gravity	Steris - AMSCO	SG-120		1	010A Rm 308
Sterilizer, Gravity	Steris - AMSCO	0126485-04		1	010A Rm 331
Sterilizer, Steam	Castle	MDT	173050902	1	173 Rm 107
Sterilizer, Steam	Castle	3020		1	201 Rm 3
Sterilizer, Steam	Buxton	9200-5		1	201 Rm 3
NAL Utility Systems					
AHU#1 Supply Fan Motor VFD#2	Reliance	P36G3327E	02NM363327G015AB	1	NAL Penthouse
AHU#1 Return Fan Motor VFD#3	Baldor	EM2539T	990210	1	NAL Penthouse
AHU#1 Supply Fan VFD#2	Energy Labs	DWDI-AF	9901-1385 AHU1	1	NAL Penthouse
AHU#1 Tower Exterior	Energy Labs	C109252-FCH-E	9901-1385-1	1	NAL Penthouse
AHU#1 Return Fan	Westinghouse Silenware Fan	WGY 4947-7		1	NAL Penthouse
AHU#1 Supply Fan Motor VFD#1	Reliance	P36G3327E	02MN363327G016AB	1	NAL Penthouse
AHU#1 Supply fan VFD#1	Energy Labs	DWDI-AF	9901-1385-AHU1-S	1	NAL Penthouse
AHU#1 Basement Equipment Room Air Handler					NAL Basement Fan Room
AHU#1A Basement Equipment Room Fan Motor	Westinghouse	AUDP	67B66389	1	NAL Basement Fan Room
AHU#1 NE Tower Stairwell Press AHU	Trane	MCCA017GALOAC AO	K96B11977	1	NAL Penthouse
AHU#1AA NE Tower	Magtek	6-85002-01-00		1	NAL

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Stairwell Press AHU Fan Motor					Penthouse
AHU#1B AHU For Electrical Vault	Trane		K02F93905	1	NAL Basement Fire Pump Room
AHU#1B Motor	A.O. Smith Century E-Plus	7-850115-01-0J	BX03	1	NAL Basement Fire Pump Room
AHU#1B	Browning V Belt Drive Kit Module 0300	P.O. B1700A002 E2H631AA	KIT# E2H631AA-017-0300	1	NAL Basement Fire Pump Room
AHU#2 Supply Fan Motor VFD#4	Reliance	P36G3327	24M363327 C013KB	1	NAL Penthouse
AHU#2 Supply Fan VFD#5	Energy Labs	DWDF-AF	9908-1529	1	NAL Penthouse
AHU#2 Supply Fan Motor VFD#5	Reliance	P36G3327	17MN363327 G022DB	1	NAL Penthouse
AHU#2 Return Fan #2 Motor VFD#6	Baldor	EM4316T	0699C-1156	1	NAL Penthouse
AHU#2 Return Fan #2 VFD#6	Loren Cook	660CADWDI		1	NAL Penthouse
AHU#2 Tower Exterior	Energy Labs	C128282-FCH-E	9908-1529-2	1	NAL Penthouse
AHU#2 Supply Fan VFD#4	Energy Labs	DWDI-AF	9908-1529	1	NAL Penthouse
AHU#2A Boiler Room Ventilation AHU				1	NAL Boiler Room
AHU#2A Fan Motor	Westinghouse	TBDP	680B101G13	1	NAL Boiler Room
AHU#2AA SW Tower Stairwell Press AHU	Trane	MCCA017GALOAC AO	K96B11921	1	NAL Penthouse
AHU#2AA SW TOWER STAIRWELL PRESS, FAN MOTOR	Magtek	6-85002-01-00		1	NAL Penthouse
AHU#3 Small Coil Section Module-Horizontal	Trane	MCCA003BAJ0C0D A0000000	K99F16705N	1	NAL 1st Floor Multipurpose Room
AHU#3 Evaporator					NAL 1st Floor Multipurpose Room
AHU#3 Condenser Unit	Trane	TTA120B400CA	P274PHXAH	1	NAL Wing Building Roof
AHU#3 Large Coil Module Section-Vertical	Trane	MCCA03CAK0C0D 0A0000000	K99F16707N	1	NAL 1st Floor Multipurpose Room
AHU#3 Access Module Section Medium	Trane	MCCA003ABH0B0 C00000	K99F16706N	1	NAL 1st Floor Multipurpose Room

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
AHU#3 Vertical Section Module-Vertical	Trane	Service Model MCCA003GAW0B AC000B0ECA00C0 B0000BE000C00000 000	K99f16708N	1	NAL 1st Floor Multipurpose Room
AHU#3 MCC Unit	Trane	MCCA003UB000A0 00U	K99F16703N	1	NAL 1st Floor Multipurpose Room
AHU#3 Mixing Box Module With Filter Frame	Trane	MCCA003MAH0C0 C0D0DAA000000000	K99F16704N	1	NAL 1st Floor Multipurpose Room
AHU#3A AHU FOR 1ST Floor Lobby Windows					NAL Fan Room Basement
AHU#3A AHU Fan Motor	Westinghouse	TBDP	680B101G03	1	NAL Fan Room Basement
AHU#4 Supply Fan #5 Motor	General Electric	5KS324AS305B	UN6272204	1	NAL East Wing Basement
AHU#4 Return Fan #6 Motor	General Electric	5KS286AC-05B	E8017	1	NAL East Wing Basement
AHU#4 Return Fan #6	Westinghouse			1	NAL East Wing Basement
AHU#4					NAL East Wing Basement
AHU#4 Supply Fan #5	Westinghouse	WGY-4947-10		1	NAL East Wing Basement
AHU#5 Supply Fan Motor F-7	Marathan	7VL286TTDP4076B EL		1	NAL Sub- Basement S.E. Side
AHU#5 Return Fan Motor F-8	General Electric	5KS284AC305A	6984200004	1	NAL Sub- Basement S.E. Side
AHU#6 Fan	Browning V-Belt Drive Kit	Kit E2S384A A- 030-0600	P.O. B02003060	1	NAL 5th Floor
AHU#6 Access Module Section-Medium	Trane	MCCB030ABA0AO AAAB00B0B00000 0	K03A07216	1	NAL 5th Floor
AHU#6 M Series Climate Changer Air Handler	Trane	E2S384A B/MA		1	NAL 5th Floor
AHU#6 Fan Motor	A.O. Smith Century E-Plus	Part 7-850004-01-0J	BX11	1	NAL 5th Floor
AHU#6 Chilled Water Coil	Trane			1	NAL Wing Building Roof
AHU#6 Large Coil	Trane	MCCB030BEB0A00	K03A07218	1	NAL 5th

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Section Module - Horizontal		AAA00BOBBABBB 0000000000A00000 000			Floor
AHU#6 Small Coil Section Module - Horizontal	Trane	MCCB030BAB0A0 0AAA0000ABCBA B000000000A0000 0000	K03A07129	1	NAL 5th Floor
AHU#6 Access Section Module - Large	Trane	MCCB030AEA0A0 0AAAB00B0BBB00 00	K03A07220	1	NAL 5th Floor
AHU#6 Discharge Phenum Module - Top Mount	Trane	MCCB030FBA0B00 AAB000A00A0000 A00A	K03A07222	1	NAL 5th Floor
AHU#6 Fan Section Module - Plug Fan	Trane	MCCB030GAC0AA 0AAPA0BA000B00 00A0CNEAB00A00 00000A000	K03A07221	1	NAL 5th Floor
AHU#6 Interface and Bypass Module	Trane	MCCB030LAA0A0 0AAABOO	K03A07217	1	NAL 5th Floor
AHU#6 Chilled Water Unit for AHU#6	Trane	CGAFC204AGA100 0000H00N00T0W00	C03A00362	1	NAL Wing Building Roof
Air Compressor - Compressor	Champion Oil Less	5VTR20	VTR5841	1	NAL Basement Fire Pump Room
Air Compressor - Compressor Motor	Baldor	M3218T - CH	SPEC. 36B001Y04661	1	NAL Basement Fire Pump Room
Air Compressor #1A Pneumatic Control Air Compressor	Qunicy	2160RBI	6220347	1	NAL Boiler Room
Air Compressor #1A Motor - Pneumatic Control Air Compressor	Baldor	35B01-372		1	NAL Boiler Room
Air Compressor #1B - Pneumatic Control Air Compressor	Qunicy	2160RBI	20020917-0133	1	NAL Boiler Room Basement
Air Compressor #1B Motor - Pneumatic Control air Compressor Motor	General Electric	5K49PN8049	OKJI 50144	1	NAL Boiler Room Basement
Air Compressor #2 - Air Compressor For Shop Air	Speed Air	3Z173		1	NAL Chiller Room Basement
Air Compressor #2 Motor - Air Compressor Motor	Dayton	2N977	F1059-01-269	1	NAL Chiller Room
Air Compressor #3 - Air Compressor Out of Service	Worthington	CB-CVB - R 114	CV5161	1	NAL Fan Room Basement
Air Compressor #3 Motor - Air Compressor Motor Out of Service	U.S. Electric	6-1321-01		1	NAL Fan Room Basement
Air Conditioner Condenser - AC Unit for	Bryant	561CPO60 - E	2998E15454	1	NAL Wing Building Roof

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Third Floor Copy Center					
Air Conditioner Condenser-AC Unit for Second Floor Copy Center	Mitsubishi	PU18EKI	67D00513D	1	NAL Wing Building Roof
Air Conditioner Condenser-AC Unit for First Floor Copy Center	Mitsubishi	PU18EKI	67D00499D	1	NAL Wing Building Roof
Air Conditioner Evaporator-AC Unit For Second Floor Copy Center	Mitsubishi	PK18EK	66GC0426C	1	NAL Second Floor Copy Center
Air Conditioner Evaporator-AC Unit For First Floor Copy Center	Mitsubishi	PK18EK	66G00420C	1	NAL First Floor Copy Center
Air Conditioner Evaporator-AC Unit for Welding Shop	Trane	TWE 090A 300BA	H 26176789	1	NAL Welding Shop Basement
Air Conditioner Evaporator-AC Unit for Third Floor Copy Center	Bryant	FC4BNF060	4196A22241	1	NAL Third Floor Copy Center
Air Conditioner Condenser-AC Unit for Welding Shop	Trane	RAUC-B624-A	C82J-06016	1	NAL Outside North
Air Conditioner Condenser-AC Unit for Verizon Center	Sanyo	C1211	66723	1	NAL Basement Work Shop
Air Conditioner Condenser-AC Condenser Unit for Freight Elevator Mech. Room	Trane	2TTA0030A4000AA	3142UF33F	1	NAL 14th Floor Roof
Air Conditioner Condenser	Bryant	569CEX072000AA AA	1498G00209	1	NAL Penthouse Roof
Air Conditioner Condenser Unit-AC Condenser Unit Stand-By for Computer Room	Hupp	201ACCU	7F102332	1	NAL Basement
Air Conditioner Condenser Unit #1-AC Condenser Unit for Computer Room	Cafci	DVS030AV32	BOE 8201	1	NAL Outside North
Air Conditioner Condenser Unit #2-AC Condenser Unit for Computer Room	Lieber	3019130		1	NAL Outside North
Air Conditioner Evaporator-AC Unit for Verizon Center	Sanyo	KS1211W	56702	1	NAL Verizon Office- Ground Floor
Air Conditioner Evaporator-AC Evaporator Unit for Freight Elevator Mech.	Trane	TWG030A140B1	321469M6V	1	NAL Freight Elevator Mechanical Room

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Room					
Air Conditioner Evaporator-AC Evaporator Unit for Passenger Elevator Mech. Room	Trane	TWE090A100BA	G51170772	1	NAL Passenger Elevator Mechanical Room
Air Conditioner Evaporator Unit-AC Evaporator Unit Stand-by for Computer Room	Baldor	MOTOR - M3219T		1	NAL Fan Room Basement (AHU#2)
Air Conditioner Evaporator Unit #1-AC Evaporator/Compressor For Computer Room	Data	DAAV 2634	88-0285-A	1	NAL Ground Floor Computer Room
Air Conditioner Evaporator Unit #2-AC Evaporator/Compressor for Computer Room	Lieber	UN199A-A00		1	NAL Ground Floor Computer Room
Air Conditioner Return Fan Motor-AC Return Fan Stand-By For Computer Room	Westinghouse	FBDP	680B101G21	1	NAL Fan Room Basement
Boiler #1-Firetube Hot Water Boiler	Continental	13681	F9C1416W59386436 A	1	NAL Boiler Room Basement
Boiler #1 Burner-Dual Fuel Burner	Industrial Combustion	LNDLG-54P-30	39869-2	1	NAL Boiler Room
Boiler #2-Fire Tube Hot Water Boiler	Continental	13680	F9C141LW59376436 A	1	NAL Boiler Room
Boiler #2 Burner-Dual Fuel Burner	Industrial Combustion	LNDLG-54P-30	39869-1	1	NAL Boiler Room
Boiler #3-Fire Tube Hot Water Boiler	Continental		F92C150LW77492436 A	1	NAL Boiler Room
Boiler #3 Burner Motor- Burner Motor	Toshiba	BY752DGF2A3		1	NAL Boiler Room
Chilled Water Pump #1	Marathon	6VD145TTDR5881 AAP		1	NAL Penthouse Ceiling
Chiller #1-Reciprocating Water Chiller	York	YCWU19/46PD	YNWM456232	1	NAL Chiller Room Basement
Chiller #2-Reciprocating Water Chiller	York	YCWU19/46PD	YNWM 456390	1	NAL Chiller Room Basement
Chiller #3-Reciprocating Water Chiller	York	YCWU19/46PD	YNWM456240	1	NAL Chiller Room Basement
Chiller #4-Reciprocating Water Chiller	York	YCWU19/46PD	YNWM456339	1	NAL Chiller Room Basement
Cooling Tower-Cooling Tower for Chillers	Baltimore Air Coil	15425-2DR	R97423431	1	NAL Tower Roof

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Cooling Tower Fan Motor #1-Fan Motor	U.S. Electric	G40875		1	NAL Tower Roof
Cooling Tower Fan Motor #2-Fan Motor	U.S. Electric	G40875		1	NAL Tower Roof
Cooling Tower Fan Motor #3-Fan Motor	U.S. Electric	G40875		1	NAL Tower Roof
Cooling Tower Fan Motor #4-Fan Motor	U.S. Electric	G40875		1	NAL Tower Roof
Cooling Tower Filter System-Centrifugal Separator	Aqua-Flow/Lakos	ILB0250	25071-003	1	NAL Tower Roof
Cooling Tower Filter System Motor-Pump Motor	Baldor	JMM3509T		1	NAL Tower Roof
Cooling Tower Filter System Pump -Pump	G&L	SSH		1	NAL Penthouse
Domestic Water Pump - Pump #2	A.P. Aurora	01-385006	Type 394.5	1	NAL Basement Fire Pump Room
Domestic Water Pump - Pump Motor #2	Marathon	7VJ215TTDW7901 ABL	PART 930-4477-993	1	NAL Basement Fire Pump Room
Domestic Water Pump - Pump #1	AP Aurora	01-385005	TYPE 392-11	1	NAL Basement Fire Pump Room
Domestic Water Pump - Pump Motor #1	Baldor	SPEC 36J483X100C1	F0111141024	1	NAL Basement Fire Pump Room
Domestic Water Pump - Pump Motor #3	Marathon	8VM215TTDW7901 ABL	PART 930-447-993	1	NAL Basement Fire Pump Room
Domestic Water Pump - Pump #3	AP Aurora	01-385006-2	TYPE 394-5	1	NAL Basement Fire Pump Room
Domestic Water Pumps-Domestic Water Pump	Tiger Flow Eng. Systems			1	NAL Basement Fire Pump Room
Exhaust Fan #1-East Wing Men's Bath Exhaust Fan	Green	CHB-10-4	115454	1	NAL East Wing Bldg. Roof
Exhaust Fan #1 Motor-East Wing Men's Bath Exhaust Fan Motor	Dayton	5K908C		1	NAL East Wing Bldg. Roof
Exhaust Fan #11-East Wing Basement Exhaust Fan				1	NAL East Wing Bldg. Roof
Exhaust Fan #11 Motor-East Wing Basement Exhaust Fan Motor	Westinghouse	TUDP		1	NAL West Wing Basement
Exhaust Fan #12				1	NAL West Wing Basement

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Exhaust Fan #12 Motor-West Wing Basement Exhaust Fan Motor	Westinghouse	TUDP	67D68019	1	NAL West Wing Basement
Exhaust Fan #13-4th Floor Photo Lab Exhaust Fan				1	NAL Fan Room Basement
Exhaust Fan #13 Motor-Fan Room Basement	TBDP	680B101C07	460	1	NAL Fan Room Basement
Exhaust Fan #14-Meter Room Exhaust Fan				1	NAL Fan Room Basement
Exhaust Fan #14 Motor-Meter Room Exhaust Fan Motor	General Electric	5KH37NG		1	NAL Fan Room Basement
Exhaust Fan #15-New Wing Bldg. Bath Exhaust Fan	Loren Cook	100C3B		1	NAL Wing Building Roof
Exhaust Fan #15 Motor-New Wing Bldg. Bath Exhaust Fan Motor	Marathon	6QF48S17D2055KP		1	NAL Wing Building Roof
Exhaust Fan #16-1st Floor Multi-Purpose Room Exhaust Fan	Loren Cook	165C3B		1	NAL Wing Building Roof
Exhaust Fan #16 Motor-1st Floor Multi-Purpose Room Exhaust Fan Motor	Marathon	6QF48S17D2055KP		1	NAL Wing Building Roof
Exhaust Fan #2	Green	CBH-14-4	115461	1	NAL East Wing Bldg. Roof
Exhaust Fan #2 Motor-East Wing Ladies' Bath Exhaust Fan Motor	Dayton	5K909C		1	NAL East Wing Bldg. Roof
Exhaust Fan #3-West Wing Bath Exhaust Fan	Dayton	4WN61		1	NAL West Wing Bldg. Roof
Exhaust Fan #3 Motor-West Wing Bath Exhaust Fan Motor	Dayton	5K115T		1	NAL West Wing Bldg. Roof
Exhaust Fan #3A-Exhaust Fan				1	NAL East Wing Multi-Zone Room
Exhaust Fan #3A Motor-Exhaust Fan Motor	General Electric	5K43K2932		1	NAL East Wing Multi-Zone Room
Exhaust Fan #4-Center Wing Exhaust Fan	Green	CH-9-A	115462	1	NAL Center Wing Bldg. Roof
Exhaust Fan #4 Motor-Center Wing Exhaust Motor	General Electric	5KH32FN3083X	YJL142723	1	NAL Center Wing Bldg. Roof

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Exhaust Fan #4A-Exhaust Fan				1	NAL West Wing Multi-Zone Room
Exhaust Fan #4A Motor-Exhaust Fan Motor	Dayton	3N042K		1	NAL West Wing Multi-Zone Room
Exhaust Fan #5-Tower Bath Exhaust Fan	Green	115457		1	NAL Tower Roof
Exhaust Fan #5 Motor-Tower Bath Exhaust Fan Motor	Baldor	M3558T	35A01-872	1	NAL Tower Roof
Exhaust Fan #6-Passenger Elevator Mech. Room Exhaust Fan	Green	CBH-48-20		1	NAL Tower Roof
Exhaust Fan #6 Motor-Passenger Elevator Mech. Room Exhaust Fan Motor	Baldor	M3558T	35A01-872	1	NAL Tower Roof
Exhaust Fan #7-Freight Elevator Mech. Room Exhaust Fan	Dayton	4WN65		1	NAL Tower Roof
Exhaust Fan #8-14th Floor Kitchen Exhaust Fan	Green	CBH-18-3	115460	1	NAL Tower Roof
Exhaust Fan #8 Motor-14th Floor Kitchen Exhaust Fan Motor	General Electric	5K33GG503	149405	1	NAL Tower Roof
Exhaust Fan #9-Wing Bldg. Smoking Room Exhaust Fan	Green	CBH-14-4		1	NAL Wing Building Roof
Exhaust Fan #9 Motor-Wing Bldg. Smoking Room Exhaust Fan Motor				1	NAL Wing Building Roof
Expansion Tank-Expansion Tank For Potable Water System	ITT Bell & Gossett	RT 180V		1	NAL Penthouse (inside AHU #1 Return Fan)
Fan #5-AHU #4 Supply Fan	Westinghouse	WGY-4947-10		1	NAL AHU #4 East Wing Basement
Fan #5 Motor-AHU #4 Supply Fan Motor	General Electric	5KS324AS305B		1	NAL AHU #4 East Wing Basement
Fan #6-AHU #4 Return Fan	Westinghouse			1	NAL AHU #4 East Wing Basement
Fan #6 Motor-AHU #4 Return Fan Motor	General Electric	5KS286AC-05B	E8017	1	NAL AHU #4 East Wing Basement
Fan #9-Basement Equipment Room Return Fan	Westinghouse			1	NAL Basement Work Shop
Fan #9- Motor-Basement	Westinghouse	TUDP	67D66494	1	NAL

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Equipment Room Return Fan Motor					Basement Work Shop
Fire Pump -Main Pump Motor	U.S. Electric	I.D.# H013 Z09Z185R023M		1	NAL Basement Fire Pump Room
Fire Pump -Primer Pump	Franklin	1303242103		1	NAL Basement Fire Pump Room
Fire Pump - Isolation/Transferee Switch	Hubbell	CAT# 25018FP	A647111-1-1	1	NAL Basement Fire Pump Room
Fire Pump -Fire Pump Control Cabinet	Hubbell	LX-2100	A647111-1-1, CAT# X21S460AM2	1	NAL Basement Fire Pump Room
Fire Pump -Centrifugal Fire Pump -Horizontal Split Case	Peerless Pump Company	GAEF10 Single Stage	161316	1	NAL Basement Fire Pump Room
Freight Elevator Exhaust Fan-Fan Motor	Dayton	3N043J	REF# R067418JK027	1	NAL Roof
Heat Exchange #1- Primary/Secondary Hot Water Heat Exchanger	Bell & Gossett	GPX538	754510-01	1	NAL Pump Room Basement
Heat Exchange-Free Cooling Heat Exchanger	Ameridex	ADX-395	93719	1	NAL Boiler Room Basement
Hot Water Pump #2-	Bell & Gossett	M10532C89		1	NAL Penthouse Ceiling
Hot Water pump #1-	ITT Bell & Gossett	M10532 C89		1	NAL Penthouse Ceiling
Humidifier	Armstrong	HC 4500	4581	1	NAL East Multi-Zone Room Basement
Humidifier #1-Electric Steam Humidifier For AHU #1	Dristeem	VLDI-56-3	1068667-02-01	1	NAL Penthouse
Humidifier #2A -Electric Steam Humidifier for AHU #2	Dristeem	VLDI-75-3	1074994-02-02	1	NAL Penthouse
Humidifier #2B-Electric Steam Humidifier for AHU #2	Dristeem	VLDI-75-3	1074994-02-01	1	NAL Penthouse
Ice Machine-Ice Cube Machine	Manitowoc 320	JY0324A	970261426	1	NAL 14th Floor Kitchen
Ice Machine-Ice Cube Machine	Manitowoc	QD0322A	20960868	1	NAL Ground Floor
MCC #5-Motor Control Center	G.E.	Spectra Series CAT.# 0672X0737A01	NP204B4142 EXP2 DIAGRAM# 336B4300	1	NAL Penthouse

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
MCC#5-Motor Control Center	G.E.	Spectra Series CAT.# 0661X0166F01	NP204B4142 EXP4 DIAGRAM# 335B8206	1	NAL Penthouse
Ozone Generator-Ozone Generator for Cooling Tower	Zentox	T2040		1	NAL Penthouse
Ozone Generator Motor-Ozone Generator Pump Motor	Unimount 125	B075A		1	NAL Penthouse
Ozone Generator Pump - Ozone Generator Pump	Burks	T3504G9-2-1/2-AI-MV 8.25	819070	1	NAL Penthouse
Pump #10 Motor-Tower Secondary Hot Water Pump Motor	Baldor	M2543T	Z0012010104	1	NAL Pump Room Basement
Pump #10 Pump -Tower Secondary Hot Water Pump	Armstrong	8 X 6 X 12.5 M4600W	C451533	1	NAL Pump Room Basement
Pump #11 -Tower Secondary Hot Water Pump	Armstrong	8X6X12.5M4600W	C451534	1	NAL Pump Room Basement
Pump #11 Motor-Tower Secondary Hot Water Pump Motor	Baldor	M2543T	Z0107230427	1	NAL Pump Room Basement
Pump #12-Tower North Nupp	Bell & Gossett	1535	1607319	1	NAL Pump Room Basement
Pump #12 Motor-Tower North Upper Rad Loop Pump Motor	Marathon	WVB56T34D1036B -W		1	NAL Pump Room Basement
Pump #13-Tower North Lower Rad Loop Pump	Bell & Gossett	1531	1525620	1	NAL Boiler Room
Pump #13-Motor-Tower North Lower Rad Loop Pump Motor	Marathon	UNVJ145TTDR535 2AA-L		1	NAL Boiler Room Basement
Pump #14-Tower South Upper Rad Loop Pump	Bell & Gossett	1535	1413821	1	NAL Boiler Room Basement
Pump #14 Motor-Tower South Upper Rad Loop Pump Motor	Century	8-164733-20	BE1-192	1	NAL Boiler Room Basement
Pump #15-Tower south Lower Rad Loop Pump	Bell & Gossett	1531	1526949	1	NAL Boiler Room Basement
Pump #15 Motor-Tower South Lower Rad Loop Pump Motor	Marathon	UVJ145TTDR5352 AA-L		1	NAL Boiler Room Basement
Pump #16-Primary Hot Water Pump	Bell & Gossett	3AC6BF D00	2192720	1	NAL Boiler Room Basement
Pump #16 Motor-Primary Hot Water Pump Motor	Lincoln	SSD2P0T61	8VKLM24187ABL	1	NAL Boiler Room Basement

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Pump #16 Suction Diffuser-Primary Hot Water Pump Suction Diffuser	Bell & Gossett	FE-3	27070	1	NAL Boiler Room Basement
Pump #17-Primary Hot Water Pump	Bell & Gossett	3AC6BF D99	2145538	1	NAL Boiler Room Basement
Pump #17 Motor-Primary Hot Water Pump Motor	Lincoln	SSD2P20T61	BVKLM24187ABL	1	NAL Boiler Room Basement
Pump #17 Suction Diffuser-Primary Hot Water Pump Suction Diffuser	Bell & Gossett	FE-3	27070	1	NAL Boiler Room Basement
Pump #18-Third Floor Overhang Hot Water North Loop Pump	Taco	1614C2N2		1	NAL Second Floor Mech Closet Room 204
Pump #18 Motor-Third Floor Overhang Hot Water North Loop Pump Motor	General Electric	5K43KG3454H		1	NAL Second Floor Mech Closet Room 205
Pump #19-Third Floor Overhang Hot Water South Loop Pump	Taco			1	NAL Second Floor Mech Closet Room 201
Pump #19 Motor-Third Floor Overhang Hot Water South Loop Pump Motor	General Electric	5K43MG2127A		1	NAL Second Floor Mech Closet Room 202
Pump #1A-Chilled Water Pump	Peerless	F2-1240AM-BF	EI 060649	1	NAL Chiller Room
Pump #1A Motor-Chilled Water Pump Motor	Lincoln	SD4P30T61Y	006894407D	1	NAL Chiller Room
Pump #1AA-Booster Pump For Stairwell Press System	Bell & Gossett 80	1.5 x 9.58.875 BF	1972756A69	1	NAL Chiller Room Basement
Pump #1AA-Booster Pump Motor	Marathon	3VB184TTDR7356 BTL		1	NAL Chiller Room Basement
Pump #1B-Chilled Water Pump	Peerless	F2-1240AM-BF	EI 060640	1	NAL Chiller Room
Pump #1B Motor-Chilled Water Pump Motor	Lincoln	SD4P30T61Y	006988807D	1	NAL Chiller Room
Pump #1C-Chilled Water Pump	Peerless	F2-1240AM-BF	EI 060649	1	NAL Chiller Room
Pump #1C-Chilled Water Pump Water	Lincoln	SD4P30T61Y	006894407D	1	NAL Chiller Room
Pump #1D-Chilled Water Pump	Bell & Gossett 1510	3E11BF10.625H99	2181109	1	NAL Chiller Room
Pump #1D Motor-Chilled Water Pump Motor	Lincoln	SSD4P20T61	9VHLM24179ABL	1	NAL Chiller Room

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Pump #20-Circulation Pump	Taco	1614C2N2		1	NAL Fan Room Upper Level Basement
Pump #20 Motor-Circulation Pump Motor	General Electric	5K43KG3454H		1	NAL Fan Room Upper Level Basement
Pump #21-Circulation Pump				1	NAL Air Handler Above Boilers
Pump #21 Motor-Circulation Pump Motor	General Electric	5K43MG2127A		1	NAL Air Handler Above Boilers
Pump #24-Fuel Oil Transfer Pump	Tutmill	70EN		1	NAL Fuel Pump Room
Pump #24 Motor-Fuel Oil transfer Pump Motor	Baldor	35B11-87		1	NAL Fuel Pump Room
Pump #25-Fuel Oil Transfer Pump	Tutmill	70EN		1	NAL Fuel Pump Room
Pump #25 Motor-Fuel Oil Transfer Pump Motor	Baldor	35B11-87		1	NAL Fuel Pump Room
Pump #2A-Condenser Water Pump	Peerless	F2-1240AM-BF		1	NAL Chiller Room Basement
Pump #2A Motor-Condenser Water Pump Motor	General Electric	5K324AL205AYD		1	NAL Chiller Room Basement
Pump #2AA-Booster Pump For Stairwell Press System	Bell & Gossett 80	1.5 X 9.58.875BF	1972757	1	NAL Chiller Room Basement
Pump #2AA Motor-Booster Pump Motor	Marathon	3VB184TTDR7356 BTL		1	NAL Chiller Room Basement
Pump #2B-Condenser Water Pump	Peerless	F2-1240AM-BF	EI 060648	1	NAL Chiller Room Basement
Pump #2B Motor-Condenser Water Pump Motor	General Electric	5KE324AS205SD24	OT618621B	1	NAL Chiller Room Basement
Pump #2C-Condenser Water Pump	Peerless	F2-1240AM-BF	EI 060648	1	NAL Chiller Room Basement
Pump #2C-Condenser Water Pump Motor	General Electric	5K324AL205D YD		1	NAL Chiller Room Basement
Pump #2D-Condenser Water Pump	Bell & Gossett 1510	3013.5BF11.875H99	2176409	1	NAL Chiller Room Basement
Pump #2D Motor-Condenser Water Pump Motor	Marathon	6VN284TTDC4026 BBS		1	NAL Chiller Room Basement

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Pump #3	Marathon	6VL145TTDR5378 ABP		1	NAL Penthouse Ceiling
Pump #5-Wing Bldg S.W. Rad Loop Pump	Bell & Gossett	1535	1382546	1	NAL Chiller Room Basement
Pump #5 Motor-Wing Bldg. S.W. Rad Loop Pump Motor	Century	8-164734-01		1	NAL Chiller Room Basement
Pump #6-Wing Bldg. N.E. Rad Loop Pump	Bell & Gossett	168028		1	NAL Chiller Room Basement
Pump #6 Motor-Wing Bldg. N.E. Rad Loop Pump Motor	Marathon	9VK56T34D5596BP		1	NAL Chiller Room Basement
Pump #7-Stand-By Pump For P12, P13, P14, P15	Worthington	1CNR62	A182720	1	NAL Boiler Room Basement
Pump #7 Motor-Stand-By Pump Motor	U.S. Electric	6-1345-01		1	NAL Boiler Room Basement
Pump #8-Stand-By Pump For P5 and P6	Worthington	1DN52	A182718	1	NAL Chiller Room Basement
Pump #8 Motor-Stand-By Pump Motor	Reliance	P18E701K-E9		1	NAL Chiller Room
Pump #9-First Floor Overhang Hot Water Pump	Bell & Gossett	1535	1669232	1	NAL East Multi-Zone Room
Pump #9 Motor-First Floor Overhang Hot Water Pump Motor	Marathon	XVB56T34D5594A L		1	NAL East Multi-Zone Room
Reverse Osmosis System-Booster Pump Motor	Magnetek	CAT# B614	PART# 10-177813-20	1	NAL Penthouse
Reverse Osmosis System-Booster Pumps -2-	Webtrol Booster Pumps, E-Z Series	H5B3		1	NAL Penthouse
Reverse Osmosis System-Booster Pump Motor	Franklin	1103007465	CAT #10402	1	NAL Penthouse
Reverse Osmosis System-Pump Motor	F & W Pump Motor	94S110	LR90197	1	NAL Penthouse
Reverse Osmosis System-Booster Pump Motor	Magnetek	CAT # B 614	PART# 10-177813-20 BU1-26	1	NAL Penthouse
Sprinkler System Pre - Action System	G.E.	5KC46KN0255AX	M450GX	1	NAL G.E.
AUTOMATIC DOORS					
Double Swing (entry)				2	Bldg. 001
Single Swing (entry)				1	Bldg. 001
Single Swing (entry)	Link			1	Bldg. 002
Single Swing (entry)				1	Bldg. 003
Single Swing (entry)	Link			2	Bldg. 004

Equipment /Item Description	MFG	Model	Serial #	Qty	Location
Single Swing (basement hall)				1	Bldg. 004
Single Swing (Rm. 012)				1	Bldg. 004
Single Swing (Rm. 014)				1	Bldg. 004
Double Swing (entry)				1	Bldg. 006
Single Swing (entry)				1	Bldg. 007
Double Slider (entry)				1	Bldg. 010A
Double Swing (entry)				1	Bldg. 010A
Single Slider (entry)				1	Bldg. 011A
Double Slider (entry)				2	Bldg. 011A
Single Swing (Rm. 281)				1	Bldg. 011A
Single Swing (2 nd floor)				1	Bldg. 011A
Single Slider (entry)				1	Bldg. 161
Single Cattle Slider				1	Bldg. 178-1

APPENDIX H: COMMITTEE SUPPORT

Beltsville Area Animal Care and Use Committee (BAACUC): The BAACUC is charged with requiring and assuring that all animals used in research and in propagation of progeny by BA scientists, collaborators, and tenants are treated in accordance with laws, regulations, and guidelines for institutional animal care. Specific major functions are:

--Annually review written research protocols submitted by all scientists conducting animal research in the BA for compliance with laws, regulations, and guidelines for institutional animal care;

--Perform semiannual inspections of all animal facilities and provide status report to BA Director's office;

--Prepare and submit annual reports to the Animal and Plant Health Inspection Service and the U.S. Public Health Service;

--Provide adequate and appropriate training opportunities (courses and seminars) in proper animal care and use; and

--Investigate all complaints concerning abuse of animals or failure to comply with laws, regulations, and guidelines for institutional animal care, and if warranted, recommend corrective action or suspend research activities.

BAACUC meetings are held monthly.

BARC Ecology Committee: The BARC Ecology Committee provides advice to, and promotes communication between researchers, farming operations, and the Area Director with respect to optimum land utilization and conservation of the indigenous biota for research and management purposes. The committee provides scouting reports on, and conducts surveys of plant species in the meadows; provides tours of meadows on request; advises on long-term management and improvement meadows; serves as liaison between researchers and farming operations on issues where activities could affect each other; advise on management of invasive species; and produce biota databases. The committee meets on an as-needed basis.

BA Standing Greenhouse Committee: The Greenhouse Committee reviews and revises all greenhouse policies, such as pesticide spraying, IPM, weekend watering, and so forth; recommends greenhouse space for repairs, maintenance, and demolition; establishes policies for assigning and using greenhouse space; has the lead for presenting the annual pesticide applicators' training and certification required by the Maryland Department of Agriculture; serves as a forum to discuss issues such as handling and use of pesticides, weekend watering, general condition of greenhouses; and keeps BA management informed of facility issues.

Industrial Hygiene Committee: The Industrial Hygiene Committee is an REE committee that meets monthly by teleconference. The Committee produces recommendations and strategies in the development of a streamlines, comprehensive and customer-friendly REE Industrial Hygiene

Program that will help ensure that all REE personnel are provided with required/needed industrial hygiene services. The Committee outlines goals, objectives, implementation steps, and target dates; assigns duties and requirements to responsible and accountable parties; and suggests priorities for implementation of recommendations. The Committee is currently writing the REE IH program, inventorying REE IH equipment, and developing relevant training.

Energy Management Committee: The Energy Management Committee provides input into the BARC Energy Management Plan; assists management units in developing and implementing action plans for energy conservation; monitors energy use and expenditures; evaluates impact of proposed energy conservation measures on research programs; and coordinates as directed by the Executive Secretary of the Committee on issues related to the Energy Savings Performance Contract.

BA Institute/Center/Division Safety Committees: All management units at the BA have a safety committee. They provide a communication link between the Safety Office and the Institute/Center/Division employees for distribution of safety materials, policies, and information; assist the Institute/Center/Division in the implementation of the safety program (for example, accident investigations, recommend corrective actions, and inspections); assist in the resolution of internal problems, consulting with the Safety Office as necessary. The Safety Committees meet at least once every 2 months to discuss safety and health issues within the organization and brief the Institute/Center/Division Director of pertinent issues. Safety Representatives will devote about 10 percent of duty time serving the area of assigned responsibility; be responsible for safety and health consultation; review accident/illness investigations conducted by supervisors; conduct safety and health inspections of facilities in their areas of responsibility and assist supervisor in abating deficiencies; accompany Safety Office staff during annual safety and health inspections; participate in applicable safety and health training programs; maintain a complete file of up-to-date ARS Safety, Health, and Environmental Management Program (ARS Manual 230.0) components; advise management on implementation of the mandates of ARS Manual 230.0 and other safety related directives; meet with Institute/Center/Division Committee at least once every 2 months. In addition, all major management units such as Institutes, Centers, and Divisions, must have a representative on the BA Safety Chairs Committee which meets quarterly to discuss issues of Area-wide concern. The NAL participates in all of the above safety committee activities with the BA.

National Agricultural Library Standing Committee on Safety and Health: The NAL Standing Committee on Safety and Health advises the NAL Management Team on safety issues, recommend solutions, and implement actions on issues related to safety and health of staff, cooperators, contractors, tenants and users. They monitor safety and health-related conditions in the Abraham Lincoln Building and the surrounding grounds, notify the appropriate individuals of any immediate threats or concerns and make recommendations for permanent improvement or abatement. They regularly review the existing fire, evacuation, and emergency preparedness procedures and documents, make recommendations regarding additions and modifications, and update plans as needed. They work with other groups, committees and individuals as appropriate to publicize and communicate safety and health related information and procedures, and plan and implement or co-host related training.

National Agricultural Library Facilities Security Committee: The NAL Facilities Security Committee advises the NAL Management Team and Administrative Office on security matters, recommend solutions, and implement actions on issues related to the security of the Abraham Lincoln Building, its occupants and property. They monitor and regularly review the disaster plans, guards' instructions, terrorist alert procedures, and other security-related documents and make recommendations regarding additions, modifications and updates. They work with other groups, committees and individuals as appropriate to publicize and communicate security-related information and procedures, and plan and implement or co-host related training.